

=> file reg

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STRUCTURE FILE UPDATES: 5 MAY 2003 HIGHEST RN 510776-00-8
DICTIONARY FILE UPDATES: 5 MAY 2003 HIGHEST RN 510776-00-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 13:07:20 ON 06 MAY 2003
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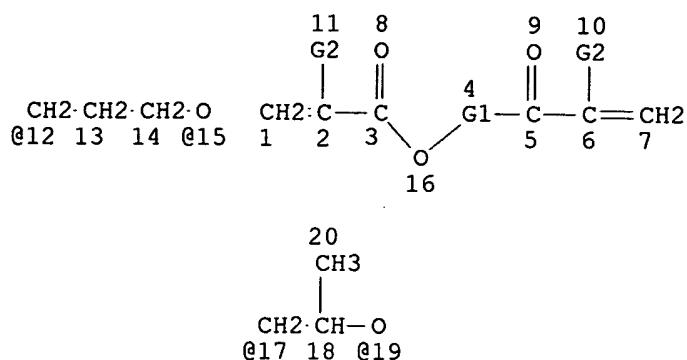
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FILE COVERS 1907 - 6 May 2003 VOL 138 ISS 19
FILE LAST UPDATED: 5 May 2003 (20030505/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d que

L5 STR



VAR G1=17-16 19-5/12-16 15-5

VAR G2=H/CH3

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

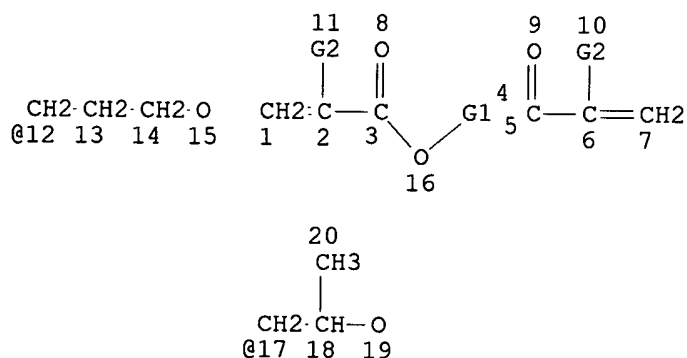
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L8

STR



VAR G1=12/17

VAR G2=H/CH3

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 5

CONNECT IS E2 RC AT 15

CONNECT IS E2 RC AT 19

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L17 1018 SEA FILE=REGISTRY SSS FUL L8

L19 182 SEA FILE=REGISTRY ABB=ON 25852-49-7/CRN

L23 93 SEA FILE=REGISTRY ABB=ON 25151-33-1/CRN

1, 018 polymers

L24 121 SEA FILE=REGISTRY ABB=ON 7559-82-2/CRN
 L28 38 SEA FILE=REGISTRY ABB=ON 1188-09-6/CRN
 L40 29 SEA FILE=REGISTRY ABB=ON 24493-53-6/CRN
 L44 296 SEA FILE=REGISTRY SUB=L17 SSS FUL L5
 L45 420 SEA FILE=HCAPLUS ABB=ON L44
 L47 422 SEA FILE=HCAPLUS ABB=ON L19 OR L23 OR L24 OR L28 OR L40
 L48 565 SEA FILE=HCAPLUS ABB=ON L45 OR L47
 L49 258 SEA FILE=HCAPLUS ABB=ON L48(L) (PREP OR IMF OR SPN)/RL
 L50 32 SEA FILE=HCAPLUS ABB=ON L49 AND OPTI?
 L51 12 SEA FILE=HCAPLUS ABB=ON L48(L) TRANSPAREN?
 L52 13 SEA FILE=HCAPLUS ABB=ON L49 AND LENS?
 L53 47 SEA FILE=HCAPLUS ABB=ON (L50 OR L51 OR L52)

47 CA references on preparation + ability

=> d l53 all hitstr 1-47

L53 ANSWER 1 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 2003:214961 HCAPLUS
 DN 138:243355
 TI Silicone copolymer reaction products with dyes for intraocular
lenses
 IN Ichinohe, Takashi
 PA Canon Star K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G02C007-04
 ICS A61L027-00; C08K005-3445; C08L083-05; C08L083-07; C09B029-085;
 C09B029-50; G02C007-10
 CC 63-7 (Pharmaceuticals)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | JP 2003084242 | A2 | 20030319 | JP 2001-279077 | 20010914 |
| | US 2003078359 | A1 | 20030424 | US 2002-236584 | 20020905 |
| | CN 1408709 | A | 20030409 | CN 2002-131696 | 20020912 |
| | EP 1293541 | A2 | 20030319 | EP 2002-256409 | 20020913 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| PRAI | JP 2001-279077 | A | 20010914 | | |
| OS | MARPAT 138:243355 | | | | |
| AB | This invention relates to colored soft intraocular lenses which show spectral transmission properties similar to human lenses . The lens materials comprise silicone polymers with side chain hydrosilyl groups reacted with arylazobenzene derivs. Silicone rubber (KE 103) was treated with 4-(4'-allyloxycarbonylphenylazo)-3-methyl-1- phenylpyrazolone and 2-hydroxy-4-methacryloyloxyethoxybenzophenone to give a colored intraocular material. | | | | |
| ST | polysiloxane arylazobenzene dye hydrosilylation product intraocular | | | | |
| | lens | | | | |
| IT | Human | | | | |
| | Intraocular lenses | | | | |
| | UV stabilizers | | | | |
| | (prepn. of silicone copolymer hydrosilylation products with yellow dyes for intraocular lenses) | | | | |
| IT | Silicone rubber, biological studies | | | | |
| | RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological | | | | |

study); PREP (Preparation); USES (Uses)
 (reaction products, with allyloxypyrazolone deriv. and
 methacryloyloxybenzophenone; prepn. of silicone copolymer
 hydrosilylation products with yellow dyes for intraocular
 lenses)

IT Polysiloxanes, biological studies

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (reaction products, with arylazobenzene derivs.; prepn. of silicone
 copolymer hydrosilylation products with yellow dyes for intraocular
 lenses)

IT 501952-94-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of colored acrylate polymers)

IT 103-33-3, Azobenzene 106-95-6, Allylbromide, reactions 107-18-6, Allyl
 alcohol, reactions 150-13-0, 4-Aminobenzoic acid 1520-21-4,
 4-Aminostyrene 19735-89-8, 3-Methyl-1-phenylpyrazolone

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of silicone copolymer hydrosilylation products with yellow dyes
 for intraocular lenses)

IT 7014-29-1P 17333-88-9P 30926-22-8P 88801-39-2P 93870-83-8P
 118969-55-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of silicone copolymer hydrosilylation products with yellow dyes
 for intraocular lenses)

IT 2035-72-5DP, reaction products with silicone rubber and
 allyloxycarbonylphenylazophenylpyrazolone 156118-35-3DP,
 Dimethylsilanediol-methylhydrogensilanediol copolymer, hydrosilylation
 products with diallyl(phenylazo)aniline and methacryloyloxyethoxybenzophen
 one

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (prepn. of silicone copolymer hydrosilylation products with yellow dyes
 for intraocular lenses)

IT 501952-94-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of colored acrylate polymers)

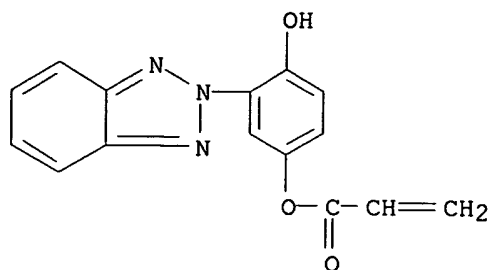
RN 501952-94-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-phenylethyl ester, polymer with
 3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl 2-propenoate,
 4-[(4-ethenylphenyl)azo]-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-one,
 2-phenylethyl 2-propenoate and 1,3-propanediyl di-2-propenoate (9CI) (CA
 INDEX NAME)

CM 1

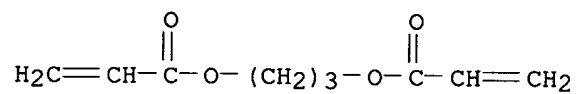
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CMF C15 H11 N3 O3



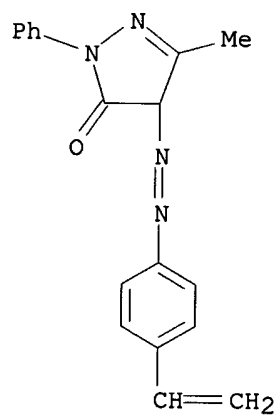
CM 2

CRN 24493-53-6
CMF C9 H12 O4



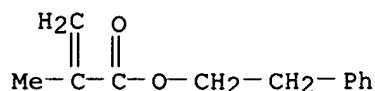
CM 3

CRN 7014-29-1
CMF C18 H16 N4 O



CM 4

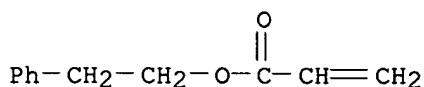
CRN 3683-12-3
CMF C12 H14 O2



CM 5

CRN 3530-36-7

CMF C11 H12 O2



L53 ANSWER 2 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:748315 HCAPLUS

DN 137:286571

TI Method for manufacturing light-scattering liquid crystal devices such as display, view-blocking window, electric billboard

IN Nakata, Hidetoshi

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G02F001-1334

ICS C08K005-00; C08L033-14

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 73, 75

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| | ----- | --- | ----- | ----- | ----- |
| PI | JP 2002287126 | A2 | 20021003 | JP 2001-89636 | 20010327 |
| PRAI | JP 2001-89636 | | 20010327 | | |

AB The title method for manufg. light-scattering liq. crystal device having a light-switching layer between a pair of substrates, at least one of which is transparent, includes the steps of: impregnating a mixt. of liq. crystals and transparent materials into pores of a transparent light-switching layer substrate having 3-dimensional structure; and phase-sepg. the mixt. The device is suitable for display devices and light-controlled device such as windows, elec. billboard and provides the high image contrast and low drive voltage.

ST light scattering liq crystal device blocking window elec billboard

IT Sign materials

(elec.; light-scattering liq. crystal devices such as view-blocking window, elec. billboard)

IT Liquid crystal displays

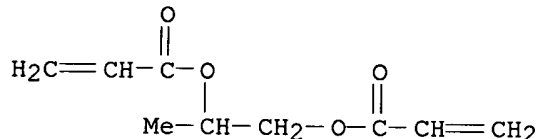
Optical imaging devices

(light-scattering liq. crystal devices such as view-blocking window, elec. billboard)

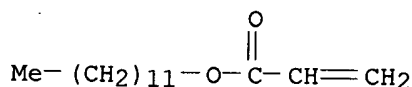
IT Windows

(liq. crystal; light-scattering liq. crystal devices such as

view-blocking window, elec. billboard)
 IT 54211-46-0 92118-81-5 92118-82-6 92118-83-7 92118-84-8
 156243-60-6 156243-63-9 183436-87-5 183436-88-6 262604-86-4
 465529-77-5
 RL: DEV (Device component use); USES (Uses)
 (light-scattering liq. crystal devices such as view-blocking window,
 elec. billboard)
 IT 159355-98-3P, Propylene glycol diacrylate-lauryl acrylate
 copolymer 220435-43-8P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (light-scattering liq. crystal devices such as view-blocking window,
 elec. billboard)
 IT 159355-98-3P, Propylene glycol diacrylate-lauryl acrylate
 copolymer
 RL: SPN (Synthetic preparation); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (light-scattering liq. crystal devices such as view-blocking window,
 elec. billboard)
 RN 159355-98-3 HCAPLUS
 CN 2-Propenoic acid, 1-methyl-1,2-ethanediyl ester, polymer with dodecyl
 2-propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 25151-33-1
 CMF C9 H12 O4



CM 2
 CRN 2156-97-0
 CMF C15 H28 O2



L53 ANSWER 3 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 2002:408361 HCAPLUS
 DN 136:409067
 TI Negative image forming material for lithographic plate
 IN Fujimaki, Kazuhiro; Sorori, Tadaihiro
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKXXAF
 DT Patent

LA Japanese
 IC ICM G03F007-033
 ICS B41N001-14; G03F007-00; G03F007-027
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 38

FAN.CNT 1

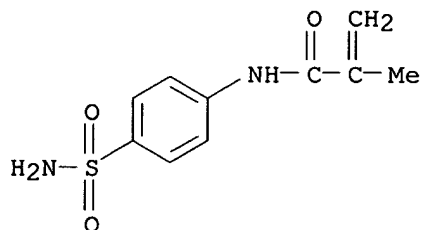
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|---------------------------------------|--------------------------------|---|--------------|
| PI | JP 2002156757 | A2 | 20020531 | JP 2000-354175 | 20001121 |
| PRAI | JP 2000-354175 | | 20001121 | | |
| AB | The material, capable of forming images by heat-mode exposure, comprises (A) a water-insol. and alkali-sol. polymer having .gtoreq.1 group selected from A(CO)CR1:CR2R3 and DCR4:CR5R6 (R1-6 = monovalent org. group; A = O, S, NR7; D = O, S, NR7, phenylene; R7 = H, monovalent group), and .gtoreq.1 group selected from XNHY and ZNHR (X, Y = divalent org. group, .gtoreq.1 of X and Y has CO, SO2; Z = CO, SO2; R = H, monovalent org. group) at the side chain, (B) a light-to-heat converting agent, and (C) an onium salt generating a radical by heat-mode exposing to light which can be adsorbed by B. Laser ablation of the material is prevented and lithog. plate with good printing durability is obtained. | | | | |
| ST | lithog plate polymer amide sulfonamide group; light heat converting agent lithog plate; onium salt radical generator lithog plate | | | | |
| IT | Optical materials (IR absorbers; neg. image forming material for lithog. plate) | | | | |
| IT | IR materials (absorbers; neg. image forming material for lithog. plate) | | | | |
| IT | Lithographic plates (neg. image forming material for lithog. plate) | | | | |
| IT | 193687-61-5 RL: TEM (Technical or engineered material use); USES (Uses) (IR absorbent; neg. image forming material for lithog. plate) | | | | |
| IT | 431881-32-2P | 431881-33-3P | 431881-34-4P | 431881-35-5P | |
| | 431881-36-6P | 431881-37-7P | 431881-38-8P | 431881-39-9P | 431881-40-2P |
| | 431881-41-3P | 431881-42-4P | 431881-43-5P | 431881-44-6P | 431881-46-8P |
| | 431881-47-9P | 431881-48-0P | 431881-49-1P | 431881-50-4P | 431881-51-5P |
| | 431881-52-6P | | | | |
| | RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (neg. image forming material for lithog. plate) | | | | |
| IT | 4986-89-4, ATMMT | 29570-58-9, DPHA | 66003-78-9, Triphenylsulfonium | | |
| | triflate | 77001-81-1 | 142342-33-4 | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (neg. image forming material for lithog. plate) | | | | |
| IT | 66822-69-3P | 149839-19-0P | 431881-53-7P | 431881-54-8P | |
| | RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (prepn. and polymn. of) | | | | |
| IT | 109-83-1, N-Methylethanolamine | 141-43-5, Ethanolamine, reactions | | | |
| | 625-36-5, 3-Chloropropionyl chloride | 868-77-9, 2-Hydroxyethyl methacrylate | 920-46-7 | 13159-51-8, 2-Hydroxybutyl methacrylate | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of radically polymerizable monomer) | | | | |
| IT | 431881-34-4P RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (neg. image forming material for lithog. plate) | | | | |
| RN | 431881-34-4 | HCAPLUS | | | |

CN 2-Propenoic acid, 2-methyl-, 1,3-propanediyl ester, polymer with
N-[4-(aminosulfonyl)phenyl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 56992-87-1

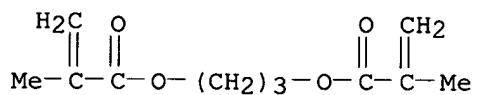
CMF C10 H12 N2 O3 S



CM 2

CRN 1188-09-6

CMF C11 H16 O4



L53 ANSWER 4 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:532029 HCAPLUS

DN 135:129638

TI Tetraazaporphin compound-containing film-forming compositions offering improved image qualities to displays

IN Tai, Seiji; Nojiri, Takeshi; Kawakami, Hiroyuki; Sasaki, Shoichi; Shimamura, Mariko

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

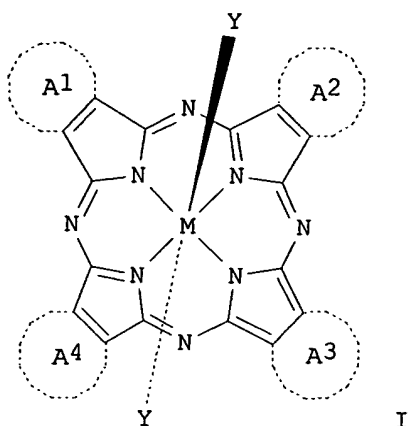
IC ICM C09B047-04

ICS G02B005-22; C07D487-22

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 2001200171 | A2 | 20010724 | JP 2000-10304 | 20000117 |
| PRAI | JP 2000-10304 | | 20000117 | | |
| OS | MARPAT 135:129638 | | | | |
| GI | | | | | |



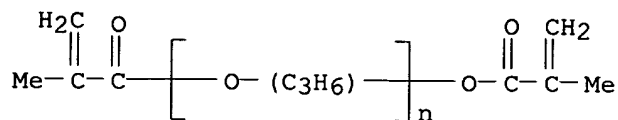
- AB The compns. for forming wavelength-selective absorption films contain (A) tetraazaporphins I [M = Si, Ge, Sn; Y = C6-18 aryloxy, C1-22 alkoxyl, OSiZ1Z2Z3 (Z1-3 = C1-22 alkyl, C6-18 aryl, C1-22 alkoxyl, C6-18 aryloxy), trityloxy, C2-13 acyloxy; Y may bear hydrophilic groups; A1-4 = (1 or 2 N-substituted) benzene ring, naphthalene ring, anthracene ring, phenanthrene ring, naphthacene ring, etc.], (B) film-forming polymers, and (C) red purple colorants. The films exhibit visible light transmittance and good weather resistance and provide on transparent substrates improved color purity and contrast while suppressing reduced resolu.
- ST tetraazaporphin film forming compn wavelength selective absorption; UV sensitive acrylic film forming compn tetraazaporphin; display wavelength selective absorption film weather resistance
- IT **Optical films**
(tetraazaporphin compd.-contg. film-forming compns. offering improved image qualities to displays)
- IT **350847-70-0P 350847-71-1P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(films; tetraazaporphin compd.-contg. film-forming compns. offering improved image qualities to displays)
- IT 1047-16-1
RL: MOA (Modifier or additive use); USES (Uses)
(red purple colorant; tetraazaporphin compd.-contg. film-forming compns. offering improved image qualities to displays)
- IT 142700-89-8 282728-85-2
RL: MOA (Modifier or additive use); USES (Uses)
(tetraazaporphin compd.-contg. film-forming compns. offering improved image qualities to displays)
- IT **350847-70-0P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(films; tetraazaporphin compd.-contg. film-forming compns. offering improved image qualities to displays)
- RN 350847-70-0 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethyl 2-propenoate, methyl 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

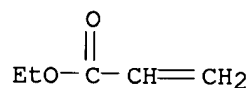
CCI IDS, PMS



CM 2

CRN 140-88-5

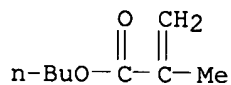
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CM 3

CRN 97-88-1

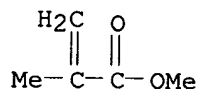
CMF C8 H14 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 5 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 2001:396939 HCAPLUS
 DN 134:368316
 TI Acrylic resin composition for coating material
 IN Makino, Takayuki; Takemoto, Toshio
 PA Mitsubishi Rayon Co., Ltd., Japan
 SO PCT Int. Appl., 45 pp.
 CODEN: PIXXD2

DT Patent
 LA Japanese
 IC ICM C08F020-10
 ICS C08F002-44; C08F004-40; C09D004-02; C09D007-12; C09D133-06
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 37

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------|---|---------------------------|--------------------------|------------------------------------|--------------------------------|
| PI | WO 2001038407 | A1 | 20010531 | WO 2000-JP8136 | 20001117 |
| | W: US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| | JP 2001206911 | A2 | 20010731 | JP 2000-348251 | 20001115 |
| | EP 1152014 | A1 | 20011107 | EP 2000-976336 | 20001117 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | US 6552130 | B1 | 20030422 | US 2001-869292 | 20010718 |
| PRAI | JP 1999-329644 | A | 19991119 | | |
| | WO 2000-JP8136 | W | 20001117 | | |
| AB | Title resin compn. comprises (A) 40-90 parts of a (meth)acrylic ester, (B) 10-60 parts of an acrylic polymer sol. in the ingredient (A), and (C), based on 100 parts of (A) and (B), 0.05-10 parts of a compd. having a mercapto group and a carboxyl group in the mol. or a compd. contg. mercapto group. The compn. may optionally contain ingredients selected from (D) a peroxide, (E) an organometallic complex, (F) an org. amine, and (G) a radical-trapping agent. The compn. is suitable for use as a coating material in building and other construction. | | | | |
| ST | acrylic coating building construction | | | | |
| IT | Polyoxyalkylenes, uses | | | | |
| | RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) | | | | |
| | (acrylic; acrylic resin compn. for coating material) | | | | |
| IT | Coating materials | | | | |
| | (weather-resistant; acrylic resin compn. for coating material) | | | | |
| IT | 340292-75-3P | 340292-76-4P | 340292-77-5P | 340292-79-7P | |
| | RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) | | | | |
| | (acrylic resin compn. for coating material) | | | | |
| IT | 111-86-4, n-Octylamine | 111-92-2, Di-n-butylamine | 542-02-9, Acetoguanamine | 1305-62-0, Calcium hydroxide, uses | 1309-42-8, Magnesium hydroxide |
| | 13963-57-0, Aluminum acetylacetonate | 340292-78-6 | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) | | | | |
| | (acrylic resin compn. for coating material) | | | | |
| IT | 9011-14-7, Polymethyl methacrylate | | | | |
| | RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) | | | | |
| | (acrylic resin compn. for coating material) | | | | |
| IT | 1931-62-0, tert-Butylperoxymaleic acid | | | | |
| | 28884-42-6 | | | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) | | | | |
| | (acrylic resin compn. for coating material) | | | | |
| IT | 2564-83-2, 2,2,6,6-Tetramethyl-1-piperidinyloxy | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) | | | | |
| | (radical-trapping agent; acrylic resin compn. for coating material) | | | | |
| RE.CNT | 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD | | | | |
| RE | | | | | |

(1) Japan Exlan Co Ltd; JP 07-149809 A 1995 HCAPLUS

- (2) Mitsubishi Rayon Co Ltd; JP 63-83007 A 1988 HCAPLUS
- (3) Mitsubishi Rayon Co Ltd; JP 63-91307 A 1988 HCAPLUS
- (4) Mitsubishi Rayon Co Ltd; JP 08-109212 A 1996 HCAPLUS
- (5) Nippon Shokubai Co Ltd; JP 07-165847 A 1995 HCAPLUS
- (6) Nippon Shokubai Kagaku Kogyo Co Ltd; JP 60-103065 A 1985 HCAPLUS

IT 340292-77-5P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)

(acrylic resin compn. for coating material)

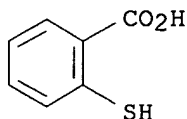
RN 340292-77-5 HCAPLUS

CN Benzoic acid, 2-mercapto-, telomer with methyl 2-methyl-2-propenoate and
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-
 propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 147-93-3

CMF C7 H6 O2 S



CM 2

CRN 9065-17-2

CMF (C5 H8 O2 . (C3 H6 O)n C8 H10 O3)x

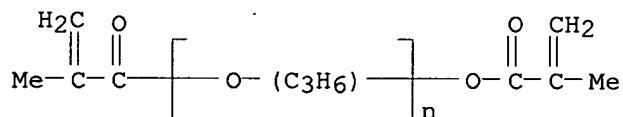
CCI PMS

CM 3

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

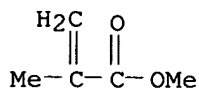
CCI IDS, PMS



CM 4

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 6 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:372252 HCAPLUS

DN 135:6997

TI Anticlogging storage-stable oil-based inks for electrostatic ink-jet printing

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00; C08F290-04

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 2001139858 | A2 | 20010522 | JP 2000-257621 | 20000828 |
| PRAI | JP 1999-242032 | A | 19990827 | | |

AB The inks contain elec. charged polymer particles prepd. from (A) .gtoreq.1 nonaq. solvent-sol. monofunctional monomers whose polymers are insol. in the nonaq. solvents, (B) .gtoreq.1 monofunctional monomer bearing NR1R2 (R1, R2 = H, C1-22 hydrocarblyl) groups, (C) .gtoreq.1 monofunctional monomer bearing SO3H and/or SO2H groups, (D) .gtoreq.1 macromonomer (Mw .ltoreq.2 .times. 104) bearing specific structural repeating units and one polymerizable terminal group, and (E) .gtoreq.1 nonaq. solvent-sol. partially crosslinked polymer dispersants in a nonaq. medium having elec. resistance .gtoreq.109 .OMEGA.-cm and dielec. const. .ltoreq.3.5. Thus, vinyl acetate was polymd. with 2-(N,N-diethylamino)ethyl crotonate, 3-sulfopropyl crotonate, 3-mercaptopropionic acid-octadecyl methacrylate telomer ester with glycidyl methacrylate in the presence of octadecyl methacrylate-divinylbenzene copolymer dispersant in Isopar H (isoalkanes) to give particles, which were formulated into an ink for lithog. printing giving good printed images.

ST storage stable lithog printing ink; polymeric dispersant oil based ink; macromonomer graft copolymer jet printing ink

IT Polyoxyalkylenes, uses
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (acrylic, dispersants; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Macromonomers
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Inks
 (jet-printing; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Inks
 (lithog.; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Dispersing agents
 (polymeric; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

- IT 5926-95-4DP, Glutaconic anhydride, reaction products with amino-contg. octadecyl methacrylate-divinylbenzene copolymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 80-62-6DP, Methyl methacrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 96-33-3DP, Methyl acrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 105-16-8DP, polymers with (meth)acrylates, reactive dispersants, and macromers 140-88-5DP, Ethyl acrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 50985-35-8DP, polymers with (meth)acrylates, reactive dispersants, and macromers 214835-07-1DP, polymers with (meth)acrylates and reactive dispersants 218459-73-5DP, polymers with (meth)acrylates and macromers 340810-96-0P 340810-97-1P 340810-98-2P 340810-99-3P 340811-00-9P 340811-01-0P 340816-08-2P 340816-10-6P 340816-11-7P 340816-12-8P 340816-13-9P 340816-14-0P 340816-15-1P 340816-16-2P 340816-17-3P 340816-18-4P 340816-20-8P 340816-22-0P 340816-24-2P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 218459-77-9DP, Ethylene glycol diacrylate-octadecyl acrylate copolymer, methacrylate group-terminated, **optionally** polymer with (meth)acrylates and macromers
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (dispersants or inks; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-26-4P, Divinylbenzene-hexadecyl methacrylate copolymer 139703-31-4P 139703-33-6P 139720-57-3P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 139720-64-2DP, reaction products with glutaconic anhydride 141181-86-4P 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-76-7P 148532-82-5P 159291-22-2P 159291-24-4P 215672-71-2P 308283-76-3P, Docosyl methacrylate-polyethylene glycol diacrylate copolymer 324529-94-4P, Ethylene glycol diacrylate-hexadecyl methacrylate copolymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (dispersants; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 148640-01-1P 159446-39-6P 159446-41-0P 159446-42-1P 159446-44-3P 159446-45-4P 159446-48-7P 214772-24-4P 214772-26-6P 214772-29-9P 218459-53-1P 218459-59-7P **218459-61-1P** 218459-65-5P 218459-67-7P 218459-70-2P 218459-72-4P 218459-73-5P 218459-74-6P 218459-75-7P 218459-76-8P 324574-60-9P 324574-61-0P
 RL: **IMF (Industrial manufacture)**; MOA (Modifier or additive use); RCT (Reactant); **PREP (Preparation)**; RACT (Reactant or reagent); USES (Uses)
 (dispersants; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 138005-14-8DP, 2,3-Dihexanoyloxypropyl methacrylate homopolymer,

methacrylate-terminated, **optionally** polymers with
(meth)acrylates and reactive dispersants

RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); TEM
(Technical or engineered material use); PREP (Preparation); RACT (Reactant
or reagent); USES (Uses)

(macromonomer or ink; anticlogging storage-stable oil-based inks for
electrostatic ink-jet printing)

IT 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P
141414-84-8P 141414-99-5P 141415-72-7P 214834-98-7P 214835-07-1P
215877-54-6P 215877-61-5P 215877-71-7P 217076-83-0P 333362-05-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)

(macromonomer; anticlogging storage-stable oil-based inks for
electrostatic ink-jet printing)

IT 218459-61-1P

RL: IMF (Industrial manufacture); MOA (Modifier or additive
use); RCT (Reactant); PREP (Preparation); RACT (Reactant or
reagent); USES (Uses)

(dispersants; anticlogging storage-stable oil-based inks for
electrostatic ink-jet printing)

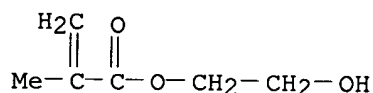
RN 218459-61-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, telomer with
hexadecyl 2-methyl-2-propenoate and mercaptoacetic acid,
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

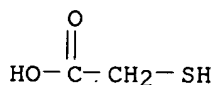
CRN 217323-01-8

CMF (C20 H38 O2 . C11 H16 O4)x . C2 H4 O2 S

CM 3

CRN 68-11-1

CMF C2 H4 O2 S



CM 4

CRN 136998-49-7

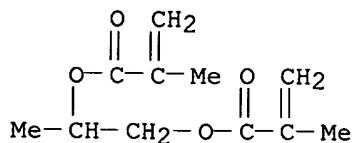
CMF (C20 H38 O2 . C11 H16 O4)x

CCI PMS

CM 5

CRN 7559-82-2

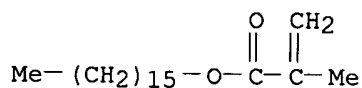
CMF C11 H16 O4



CM 6

CRN 2495-27-4

CMF C20 H38 O2



L53 ANSWER 7 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 2001:107943 HCAPLUS
 DN 134:164633
 TI Oil-based inks for electrostatic ink jet printing
 IN Kato, Eiichi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 47 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C09D011-00
 ICS B41J002-01; B41M005-00
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 74
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 2001040257 | A2 | 20010213 | JP 2000-154625 | 20000525 |
| PRAI | JP 1999-145225 | A | 19990525 | | |

AB Title inks are obtained by dispersing charge-bearing resin particles in a nonaq. liq. medium having elec. resistance of .gtoreq.109 .OMEGA..cntdot.cm and permittivity of .ltoreq.3.5, where the particles are prepd. by the polymn. of (A) monofunctional monomers which are sol. in nonaq. solvents and become insol. in the solvents by polymn. and (B) amino group-contg. monomers and monofunctional macromonomers with Mw .ltoreq. 2 .times. 104 in the presence of polymeric dispersion stabilizers sol. in the nonaq. solvents. Thus, octadecyl methacrylate-divinylbenzene copolymer dispersion stabilizer 15, vinyl acetate 93, 2-(N,N-diethylamino)ethyl crotonate 5, and macromonomer CH2:CMecOOCH2CH(OH)CH2OCOCH2CH2S[CH2CMe(COOC18H37)]nH 4, and Isopar H 285

- g were heated to give a resin particle with av. diam. 0.38 .mu.m and Mw 1 .times. 105, which gave an oil-based ink having good discharge stability and clear image.
- ST oil based ink charge resin particle prepn; electrostatic ink jet printing ink
- IT Printing (nonimpact)
(electrostatic; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT Inks
(jet-printing; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT Dispersing agents
(polymeric; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT Lithographic plates
(prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT Macromonomers
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT 2638-94-ODP, 4,4'-Azobis(4-cyanovaleric acid), reaction products with methacrylate polymers and **optionally** glycidyl methacrylate
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(dispersion stabilizer or macromonomer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-21-9P, Divinylbenzene-tridecyl methacrylate copolymer 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, carboxy-terminated 139703-31-4P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer 139703-33-6P, Divinylbenzene-thioglycolic acid-tridecyl methacrylate telomer 139703-38-1P 139720-57-3P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 141181-86-4P, Divinylbenzene-dodecyl methacrylate-thioglycolic acid telomer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-76-7P 159291-22-2P 159291-24-4P 215672-71-2P 308283-76-3DP, Docosyl methacrylate-polyethylene glycol diacrylate copolymer, hydroxy-terminated 324529-94-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(dispersion stabilizer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT 4693-47-4DP, 4,4'-Azobis(4-cyanopentanol), reaction products with (meth)acrylate polymers and **optionally** methacryloyl chloride
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(dispersion stabilizer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)
- IT 108-05-4DP, Vinyl acetate, reaction products with methacrylate telomers 920-46-7DP, Methacryloyl chloride, reaction products with hydroxy-terminated acrylate polymers 148640-01-1P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 159446-39-6P 159446-41-0P 159446-42-1P

159446-45-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with methacrylic acid 159446-48-7P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with acrylic acid 166242-47-3DP, reaction products with vinyl acetate 214772-24-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with 2-carboxyethyl acrylate 214772-26-6P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with .alpha.-chloroacrylic acid 214772-29-9P 218459-53-1P, Allyl methacrylate-dodecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-59-7P, Ethylene glycol dimethacrylate-octadecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-61-1P, Hexadecyl methacrylate-propylene glycol dimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-65-5P, Butyl methacrylate-divinyl adipate-dodecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-67-7P 218459-70-2P, 2-Chloroethyl methacrylate-tridecyl methacrylate-trimethylolpropane trimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-72-4P, Divinylbenzene-styrene-tetradecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-73-5P 218459-74-6P 218459-75-7P 218459-76-8P 218459-77-9DP, Ethylene glycol diacrylate-octadecyl acrylate copolymer, hydroxy-terminated, esters with methacryloyl chloride 324529-96-6P 324574-60-9P 324574-61-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(dispersion stabilizer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)

IT 106-91-2DP, Glycidyl methacrylate, reaction products with carboxy-terminated methacrylate polymers 138005-14-8DP, carboxy-terminated, reaction products with glycidyl methacrylate 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P, 3-Mercaptopropionic acid-octadecyl methacrylate telomer, ester with glycidyl methacrylate 139105-12-7P 141414-84-8P 141414-99-5P 141415-72-7P 143709-80-2P 214835-07-1P 215877-54-6P 215877-61-5P 215877-71-7P 217076-83-0P 320784-83-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromonomer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)

IT 324529-97-7P 324529-98-8P 324529-99-9P 324530-00-9P 324530-01-0P
324530-02-1P 324530-03-2P 324530-04-3P 324530-05-4P 324530-06-5P
324530-07-6P 324530-08-7P 324530-09-8P 324530-10-1P 324530-11-2P
324530-12-3P 324530-13-4P 324530-14-5P 324530-15-6P 324530-16-7P
324530-17-8P 324530-18-9P 324530-19-0P 324530-21-4P 324530-29-2P
324753-00-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of resin particles for electrostatic ink jet printing oil-based inks)

IT 218459-61-1P, Hexadecyl methacrylate-propylene glycol dimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

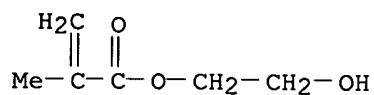
(dispersion stabilizer; prepn. of resin particles for electrostatic ink jet printing oil-based inks)

RN 218459-61-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, telomer with
hexadecyl 2-methyl-2-propenoate and mercaptoacetic acid,
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C6 H10 O3

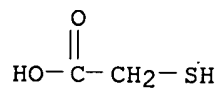


CM 2

CRN 217323-01-8
CMF (C20 H38 O2 . C11 H16 O4)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S

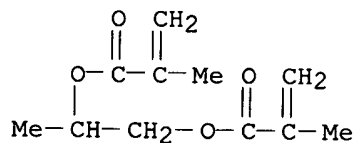


CM 4

CRN 136998-49-7
CMF (C20 H38 O2 . C11 H16 O4)x
CCI PMS

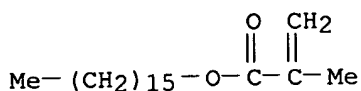
CM 5

CRN 7559-82-2
CMF C11 H16 O4



CM 6

CRN 2495-27-4
CMF C20 H38 O2



L53 ANSWER 8 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:101208 HCAPLUS

DN 134:163821

TI Polymerizable compositions for making transparent polymer substrates, resulting transparent polymer substrates and uses thereof in

optics

IN Richard, Gilles; Primel, Odile; Yean, Leanirith

PA Essilor International Compagnie Generale D'optique, Fr.

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM C08F222-10

ICS G02B001-04

CC 37-3 (Plastics Manufacture and Processing)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2001009206 | A1 | 20010208 | WO 2000-FR2213 | 20000801 |
| | W: JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | FR 2797265 | A1 | 20010209 | FR 1999-10032 | 19990802 |
| | EP 1218428 | A1 | 20020703 | EP 2000-956590 | 20000801 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| | JP 2003506500 | T2 | 20030218 | JP 2001-514010 | 20000801 |
| | US 2003027960 | A1 | 20030206 | US 2002-61761 | 20020201 |
| PRAI | FR 1999-10032 | A | 19990802 | | |
| | WO 2000-FR2213 | W | 20000801 | | |
| AB | The invention concerns a compn. comprising: 40-95 parts CH ₂ :CR1CO2ACOCR2:CH ₂ [I; R ₁ , R ₂ = H or CH ₃ ; A = (CH ₂ CH ₂ CH ₂ O) _m or (CH ₂ CHMeO) _m ; m = 2-6]; 5-50 parts monomer (II) comprising .gtoreq.1 urethane or urea unit and .gtoreq.2 (meth)acrylate functions; and 0-10 parts monomer (III) with high Abbe no. and comprising .gtoreq.1 (meth)acrylate function(s). The invention is useful for making optical and ophthalmic articles for replacement of similar articles prepd. from compns. contg. diethylene glycol diallyl carbonate by polymn. of mixts. of I, II, and III in a mold. | | | | |
| ST | polyoxyalkylene bisacrylate copolymer optical molding; urethane methacrylate copolymer lens manuf; urea acrylate copolymer lens manuf | | | | |
| IT | Polyoxyalkylenes, preparation RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses) (acrylic-polyisocyanurate-; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in optics) | | | | |
| IT | Polyisocyanurates RL: DEV (Device component use); IMF (Industrial manufacture); PRP | | | | |

applicants

(Properties); PREP (Preparation); USES (Uses)
 (acrylic-polyoxyalkylene-; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT **Lenses**

(polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT Polyurethanes, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PRP

(Properties); PREP (Preparation); USES (Uses)

(polyoxyalkylene-, acrylic; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT 325144-03-4P 325144-05-6P 325144-06-7P

325144-07-8P 325145-65-1P 325145-66-2P

325145-67-3P

RL: DEV (Device component use); IMF (Industrial manufacture);

PRP (Properties); PREP (Preparation); USES (Uses)

(polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT 325144-04-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM

(Technical or engineered material use); PREP (Preparation); USES

(Uses)

(polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Mitsubishi Rayon Co Ltd; EP 0441383 A 1991 HCAPLUS

(2) Pilkington Visioncare Inc; EP 0453149 A 1991 HCAPLUS

IT 325144-03-4P 325144-05-6P 325144-06-7P

325144-07-8P 325145-65-1P 325145-66-2P

325145-67-3P

RL: DEV (Device component use); IMF (Industrial manufacture);

PRP (Properties); PREP (Preparation); USES (Uses)

(polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

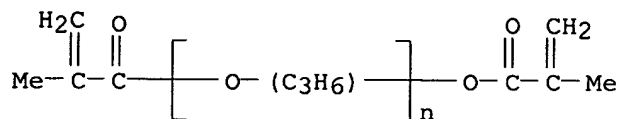
RN 325144-03-4 HCAPLUS

CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 16-methyl-10,15-dioxo-12-[[[(1-oxo-2-propenyl)oxy]methyl]-, 1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 91105-84-9

CMF C28 H40 N2 O12



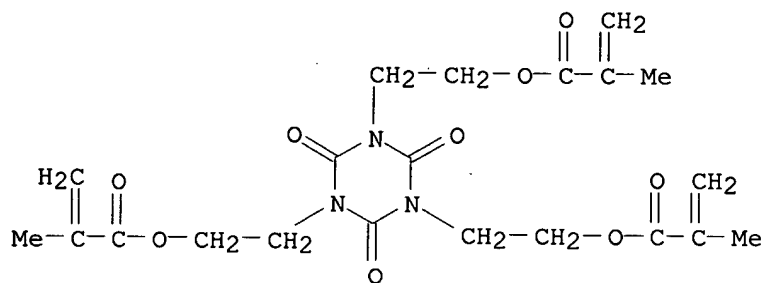
RN 325144-06-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-
 triyl)tri-2,1-ethanediyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-
 propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-
 ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 35838-12-1

CMF C21 H27 N3 O9

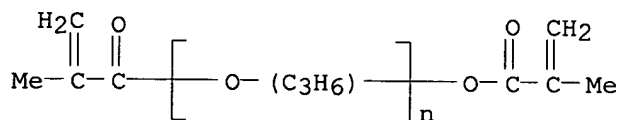


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



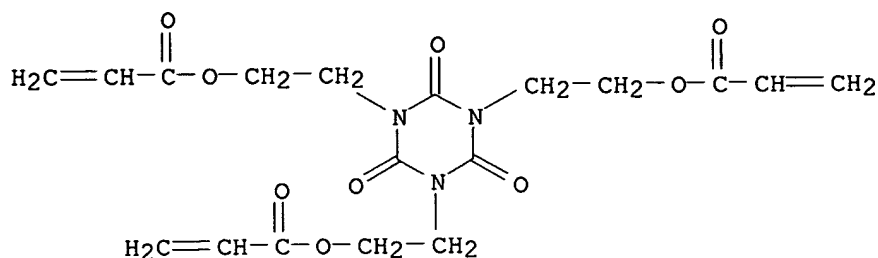
RN 325144-07-8 HCAPLUS

CN 2-Propenoic acid, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-
 2,1-ethanediyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-
 .omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)]
 (9CI) (CA INDEX NAME)

CM 1

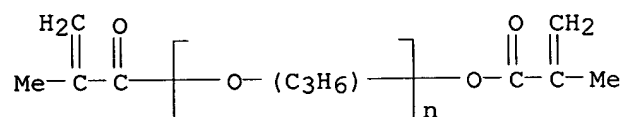
CRN 40220-08-4

CMF C18 H21 N3 O9



CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



RN 325145-65-1 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-
.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with Craynor CN 965
(9CI) (CA INDEX NAME)

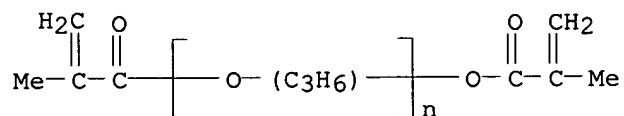
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CRN 152206-21-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



RN 325145-66-2 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-
.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with Craynor CN 934
(9CI) (CA INDEX NAME)

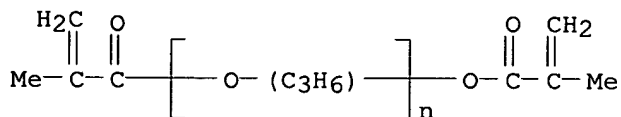
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CRN 191234-12-5
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



RN 325145-67-3 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-
.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with Ebecryl 8800 (9CI)
(CA INDEX NAME)

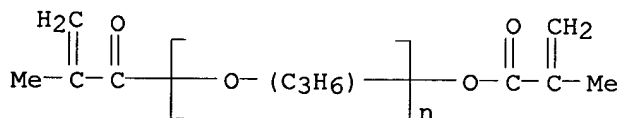
CM 1

CRN 135991-06-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



IT 325144-04-5P

RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)

(polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and
urea- or urethane-contg. poly(meth)acrylates for making
transparent polymer moldings, for use in **optics**)

RN 325144-04-5 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-
.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with Ebecryl 270 (9CI)
(CA INDEX NAME)

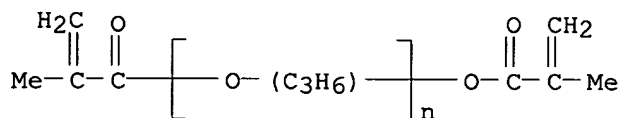
CM 1

CRN 79586-45-1
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



L53 ANSWER 9 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:101207 HCAPLUS

DN 134:163820

TI Polymerizable compositions for making transparent polymer moldings, resulting polymer moldings, and use thereof in **optics**

IN Richard, Gilles; Primel, Odile; Yean, Leanirith

PA Essilor International Compagnie Generale D'optique, Fr.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM C08F222-10

ICS G02B001-04

CC 37-3 (Plastics Manufacture and Processing)

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001009205 | A1 | 20010208 | WO 2000-FR2200 | 20000731 |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| FR 2797264 | A1 | 20010209 | FR 1999-10031 | 19990802 |
| EP 1129118 | A1 | 20010905 | EP 2000-956578 | 20000731 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2003506499 | T2 | 20030218 | JP 2001-514009 | 20000731 |
| US 2002061993 | A1 | 20020523 | US 2001-824998 | 20010402 |
| PRAI FR 1999-10031 | A | 19990802 | | |
| WO 2000-FR2200 | W | 20000731 | | |

AB The invention concerns a compn. comprising: 35-70 parts
 CH₂:CR1CO₂ACOCR₂:CH₂ [I; R₁, R₂ = H or CH₃; A = (CH₂CH₂CH₂O)_m or

(CH₂CHMeO)_m; m = 4-20]; 5-50 parts monomer (II) comprising .gtoreq.1 urethane or urea unit and .gtoreq.2 (meth)acrylate functions; and 5-40 parts monomer (III) with high Abbe no. and comprising .gtoreq.1 methacrylate function(s) (such as tert-Bu methacrylate), the total of monomers I, II, and III representing 100 parts by wt. The invention is useful for making **optical** and ophthalmic articles for replacement of similar articles prepd. from compns. contg. diethylene glycol diallyl carbonate by polymn. of mixts. of I, II, and III in a mold.

ST polyoxyalkylene bisacrylate copolymer **optical** molding; tertiary butyl methacrylate copolymer **optical** molding; urethane methacrylate copolymer **lens** manuf

IT Polyoxyalkylenes, preparation
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
 (acrylic-polyisocyanurate-; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT Polyisocyanurates
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
 (acrylic-polyoxyalkylene-; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT **Lenses**
 (polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT Polyurethanes, preparation
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
 (polyoxyalkylene-, acrylic; polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making transparent polymer moldings, for use in **optics**)

IT **325470-85-7P 325470-86-8P 325470-87-9P**
325470-88-0P 325470-89-1P 325470-90-4P
325470-91-5P 325470-92-6P 325470-93-7P
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
 (polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making **transparent** polymer moldings, for use in **optics**)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
 (1) Mitsubishi Rayon Co Ltd; EP 0441383 A 1991 HCAPLUS
 (2) Pilkington Visioncare Inc; EP 0453149 A 1991 HCAPLUS

IT **325470-85-7P 325470-86-8P 325470-87-9P**
325470-88-0P 325470-89-1P 325470-90-4P
325470-91-5P 325470-92-6P 325470-93-7P
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
 (polymerizable compns. contg. polyoxyalkylene di(meth)acrylates and urea- or urethane-contg. poly(meth)acrylates for making **transparent** polymer moldings, for use in **optics**)

RN 325470-85-7 HCAPLUS

CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with

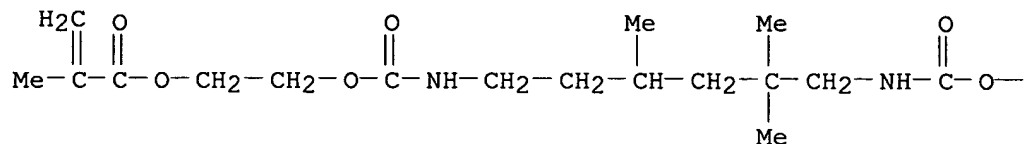
1,1-dimethylethyl 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

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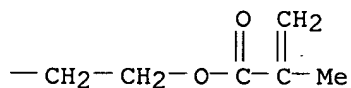
CRN 41137-60-4

CMF C23 H38 N2 O8

PAGE 1-A



PAGE 1-B

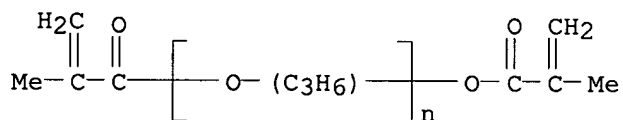


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

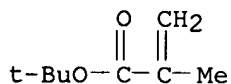
CCI IDS, PMS



CM 3

CRN 585-07-9

CMF C8 H14 O2



RN 325470-86-8 HCAPLUS

CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX

.alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and trimethylcyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

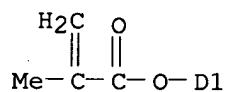
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CMF C13 H22 O2

CCI IDS



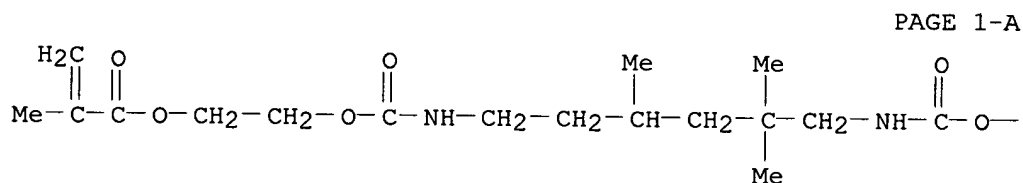
3 (D1-Me)



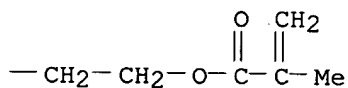
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CRN 41137-60-4

CMF C23 H38 N2 O8



PAGE 1-B

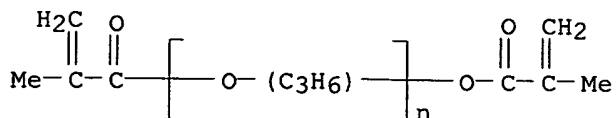


CM 3

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



RN 325470-88-0 HCAPLUS

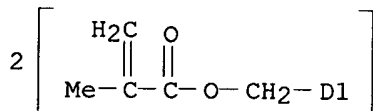
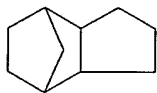
CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 4,4,6,16-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and (octahydro-4,7-methano-1H-indene-5,?-diyl)bis(methylene) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 43048-08-4

CMF C20 H28 O4

CCI IDS

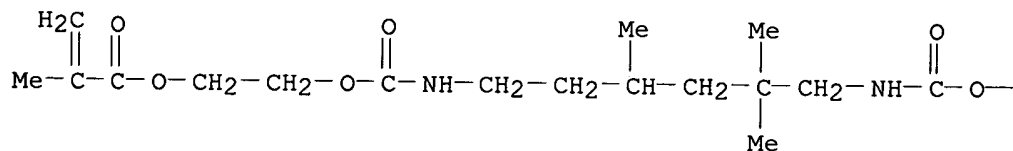


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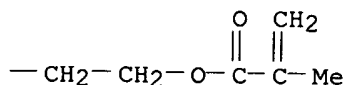
CRN 41137-60-4

CMF C23 H38 N2 O8

PAGE 1-A

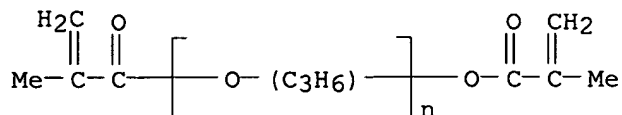


PAGE 1-B



CM 3

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS

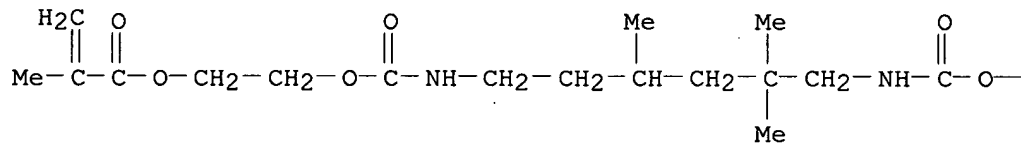


RN 325470-89-1 HCAPLUS
 CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,16-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and octahydro-4,7-methano-1H-inden-5-yl 2-propenoate (9CI) (CA INDEX NAME)

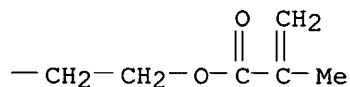
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PAGE 1-A

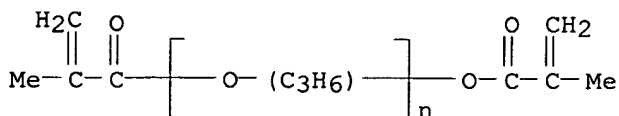


PAGE 1-B



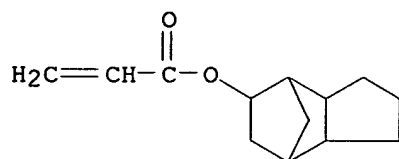
CM 2

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 3

CRN 7398-56-3
CMF C13 H18 O2

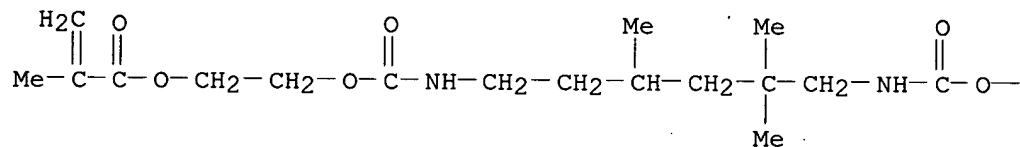


RN 325470-90-4 HCAPLUS
CN 11,14-Dioxo-2,9-diazaheptadec-16-enoic acid, 4,4,6,16-tetramethyl-10,15-dioxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

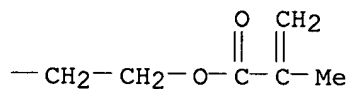
CM 1

CRN 41137-60-4
CMF C23 H38 N2 O8

PAGE 1-A

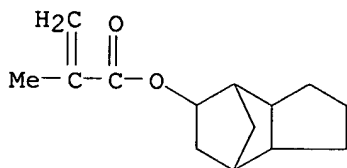


PAGE 1-B



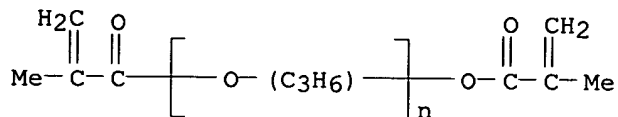
CM 2

CRN 34759-34-7
CMF C14 H20 O2



CM 3

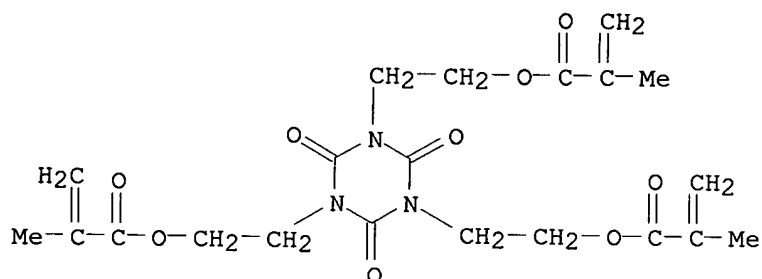
CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



RN 325470-91-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-
 triyl)tri-2,1-ethanediyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-
 propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-
 ethanediyl)] and octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate
 (9CI) (CA INDEX NAME)

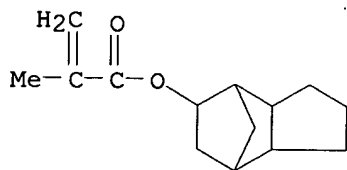
CM 1

CRN 35838-12-1
 CMF C21 H27 N3 O9



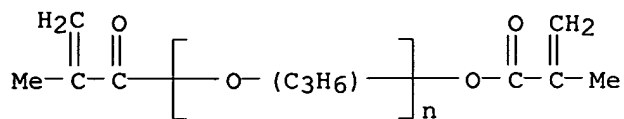
CM 2

CRN 34759-34-7
 CMF C14 H20 O2



CM 3

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



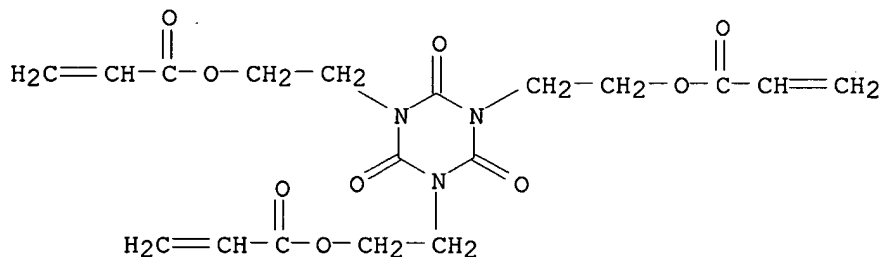
RN 325470-92-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octahydro-4,7-methano-1H-inden-5-yl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 40220-08-4

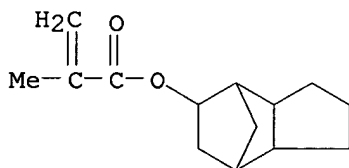
CMF C18 H21 N3 O9



CM 2

CRN 34759-34-7

CMF C14 H20 O2

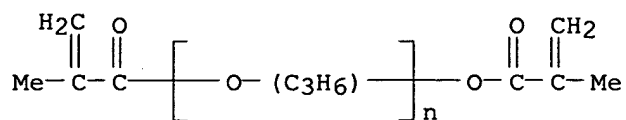


CM 3

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

CCI IDS, PMS



RN 325470-93-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octahydro-4,7-methano-1H-inden-5-yl ester,
 polymer with CN 964 and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
 methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
 INDEX NAME)

CM 1

CRN 149315-73-1

CMF Unspecified

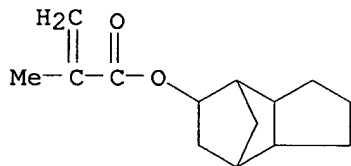
CCI PMS, MAN

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CM 2

CRN 34759-34-7

CMF C14 H20 O2

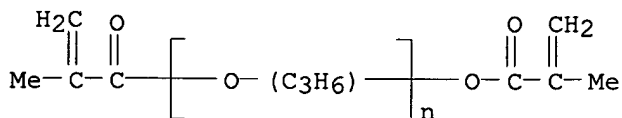


CM 3

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



L53 ANSWER 10 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:64055 HCAPLUS

DN 134:132301

TI Curable compositions for photochromic compound-containing polymers

IN Momoda, Junji; Kawasaki, Takayoshi; Ohtani, Toshiaki

PA Tokuyama Corporation, Japan

SO PCT Int. Appl., 103 pp.

CODEN: PIXXD2

DT Patent
 LA Japanese
 IC ICM C08F220-10
 ICS C08L033-00; C08L063-00; C08K005-1545; C09D133-04; G02B005-23;
 G02C007-10

CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 73

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2001005854 | A1 | 20010125 | WO 2000-JP4819 | 20000718 |
| | W: AU, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 1130038 | A1 | 20010905 | EP 2000-946385 | 20000718 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRAI | JP 1999-205165 | A | 19990719 | | |
| | JP 1999-295835 | A | 19991018 | | |
| | WO 2000-JP4819 | W | 20000718 | | |
| AB | Monomers having Rockwell hardness in scale L .ltoreq.40, bifunctional monomers having hardness .gtoreq.60, and polyfunctional monomers having hardness .gtoreq.60 are polymd. in the presence of photochromic compds. to prep. polymers having high color d. and fading rate and good hardness and heat resistance and impact resistance. Thus, a sheet contained glycidyl methacrylate-.alpha.-methylstyrene-polyethylene glycol methacrylate-tetraethylene glycol dimethacrylate-trimethylolpropane trimethacrylate copolymer and a chroman compd. | | | | |
| ST | photochromic vinyl polymer chroman | | | | |
| IT | Hardness (mechanical) | | | | |
| | (Rockwell; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Polyurethanes, preparation | | | | |
| | RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) | | | | |
| | (acrylates, polymers with vinyl monomers; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Coating materials | | | | |
| | (photochromic, lens ; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Lenses | | | | |
| | (photochromic; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Vinyl compounds, preparation | | | | |
| | RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) | | | | |
| | (polymers; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Polymerization | | | | |
| | (radical; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Oligomers | | | | |
| | RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) | | | | |
| | (urethane acrylates, polymers with vinyl monomers; vinyl polymers contg. photochromic compds.) | | | | |
| IT | Photochromic materials | | | | |
| | (vinyl polymers contg. photochromic compds.) | | | | |
| IT | Alkynes | | | | |

RL: MOA (Modifier or additive use); USES (Uses)
(vinyl polymers contg. photochromic compds.)

IT Monomers

RL: RCT (Reactant); RACT (Reactant or reagent)
(vinyl polymers contg. photochromic compds.)

IT 79-41-4DP, Methacrylic acid, esters with urethane oligomers
321860-78-0DP, polymers with urethane oligomer tetramethacrylates
321860-78-0P, Glycidyl methacrylate-.alpha.-methylstyrene-polyethylene
glycol methacrylate-tetraethylene glycol dimethacrylate-trimethylolpropane
trimethacrylate copolymer 321860-79-1DP, polymers with urethane oligomer
tetramethacrylates 321860-79-1P 321860-82-6P 321860-83-7P
321860-84-8P 321860-85-9P 321860-86-0P 321860-87-1P 321860-88-2P
321860-89-3P **321860-90-6P** 321860-91-7P 321860-93-9P
321860-94-0P 321860-95-1P 321860-96-2P 321860-97-3P 321860-98-4P
321860-99-5P 321861-00-1P 321861-01-2P 321861-02-3P 321861-03-4P
321861-05-6P 321861-08-9P 321861-12-5P **321861-15-8P**
321861-17-0P 321861-18-1P 321861-20-5P 321861-21-6P 321861-22-7P
321861-23-8P 321861-24-9P 321861-25-0P 321861-27-2P 321861-28-3P
321861-30-7P 321861-32-9P 321861-34-1P 321936-46-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);
PRP (Properties); TEM (Technical or engineered material use); **PREP**
(Preparation); USES (Uses)
(vinyl polymers contg. photochromic compds.)

IT 215598-12-2 217940-11-9 308283-10-5 308283-35-4 308830-06-0
308830-08-2 312969-97-4 321861-35-2

RL: MOA (Modifier or additive use); USES (Uses)
(vinyl polymers contg. photochromic compds.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Hoya Corporation; JP 534649 A 1993
- (2) Mitsubishi Rayon Co Ltd; JP 04202309 A 1992 HCAPLUS
- (3) Sekisui Plastics Co Ltd; JP 06220247 A 1994 HCAPLUS
- (4) Tokuyama Corp; JP 10338869 A 1998 HCAPLUS

IT **321860-90-6P 321861-15-8P**

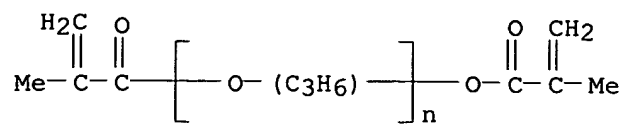
RL: IMF (Industrial manufacture); POF (Polymer in formulation);
PRP (Properties); TEM (Technical or engineered material use); **PREP**
(Preparation); USES (Uses)
(vinyl polymers contg. photochromic compds.)

RN 321860-90-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester,
polymer with 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-
propanediyl bis(2-methyl-2-propenoate), .alpha.-(2-methyl-1-oxo-2-
propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-
ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and
oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI)
(CA INDEX NAME)

CM 1

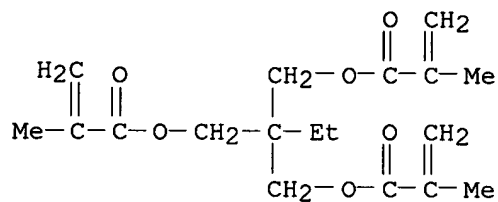
CRN 25852-49-7
CMF (C3 H6 O)n C8 H10 O3
CCI IDS, PMS



CM 2

CRN 3290-92-4

CMF C18 H26 O6

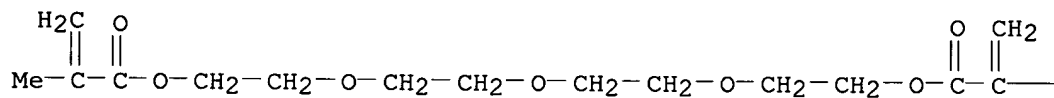


CM 3

CRN 109-17-1

CMF C16 H26 O7

PAGE 1-A



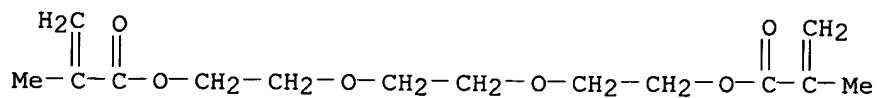
PAGE 1-B

—Me

CM 4

CRN 109-16-0

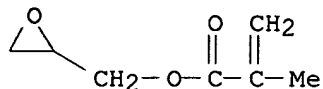
CMF C14 H22 O6



CM 5

CRN 106-91-2

CMF C7 H10 O3



RN 321861-15-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and oxybis[(methyl-2,1-ethanediyl)oxy(methyl-2,1-ethanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

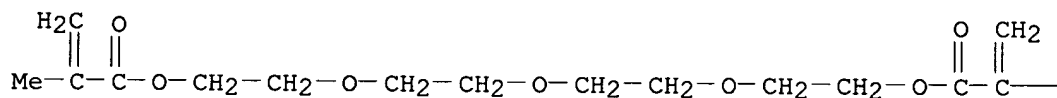
CM 1

CRN 66550-98-9

CMF C20 H34 O7

CCI IDS

PAGE 1-A



4 (D1-Me)

PAGE 1-B

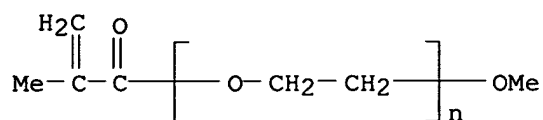
— Me

CM 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

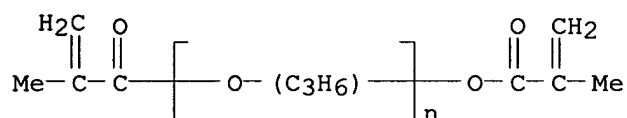


CM 3

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

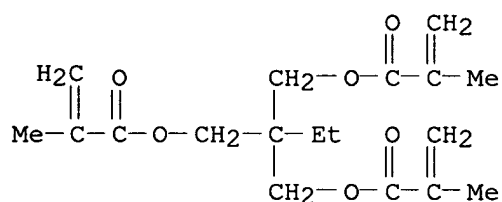
CCI IDS, PMS



CM 4

CRN 3290-92-4

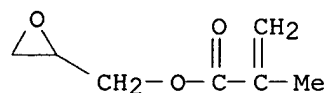
CMF C18 H26 O6



CM 5

CRN 106-91-2

CMF C7 H10 O3



L53 ANSWER 11 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 2000:824345 HCAPLUS
 DN 134:5661
 TI Polymeric structural support membrane
 IN Pretorius, Hendrik Johannes Gideon
 PA Knox, John Andrew, Australia
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXXD2

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

DT Patent
 LA English
 IC ICM C08L033-08
 ICS C08L033-10; C08F002-44; E21D019-00
 CC 38-3 (Plastics Fabrication and Uses)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2000069970 | A1 | 20001123 | WO 2000-AU460 | 20000515 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | BR 2000011271 | A | 20020305 | BR 2000-11271 | 20000515 |
| PRAI | US 1999-134454P | P | 19990517 | | |
| | WO 2000-AU460 | W | 20000515 | | |
| AB | A polymeric excavation structural support membrane comprises a polymer that is a initiator-induced reaction product of monomers; a self-extinguishing agent; and optionally a crosslinking agent, a rheol. modifier, a reaction rate modifier, a plasticizer, an emulsifier, a defoamer, a filler, a wet surface adhesion modifier, and a coloring agent; wherein the monomers are selected from the group consisting of alkyl (meth)acrylates. The membrane has a tensile strength, a thickness, and a mol. wt. sufficient to provide support to exposed surfaces in an excavation, such as mines, to prevent rock falls. | | | | |
| ST | alkyl methacrylate polymer membrane structural support | | | | |
| IT | 9016-45-9, Polyethylene glycol nonylphenyl ether | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) (emulsifier; polymeric structural support membrane) | | | | |
| IT | 7782-42-5, Graphite, uses | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) (exfoliated, self-extinguishing agent; polymeric structural support membrane) | | | | |
| IT | 7631-86-9, Silica, uses | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) (fumed, rheol. modifier; polymeric structural support membrane) | | | | |
| IT | 99-97-8, N,N-Dimethyl-p-toluidine | | | | |
| | RL: CAT (Catalyst use); USES (Uses) (polymeric structural support membrane) | | | | |
| IT | 100-42-5DP, Styrene, polymers 27813-02-1DP, Hydroxypropyl methacrylate, polymers 41637-38-1DP, Bisphenol A-ethylene oxide adduct dimethacrylate, polymers 94772-54-0P 308285-13-4P 308285-14-5P 308285-15-6P 308285-16-7P 308285-17-8P | | | | |
| | RL: IMF (Industrial manufacture) ; POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (polymeric structural support membrane) | | | | |
| IT | 121-69-7, Dimethylaniline, uses | | | | |
| | RL: CAT (Catalyst use); USES (Uses) (reaction rate modifier; polymeric structural support membrane) | | | | |
| IT | 115-86-6, Triphenyl phosphate | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) (self-extinguishing agent; polymeric structural support membrane) | | | | |

IT 12173-47-6, Hectorite

RL: MOA (Modifier or additive use); USES (Uses)
(tetraalkylammonium, rheol. modifier; polymeric structural support membrane)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Bayer Ag; DE 3822088 A 1990 HCAPLUS
- (2) Kyowa Kk; NL 1010837 A 1999 HCAPLUS
- (3) Zeon Kasei Kk; JP 11263894 A 1999 HCAPLUS

IT 308285-17-8P

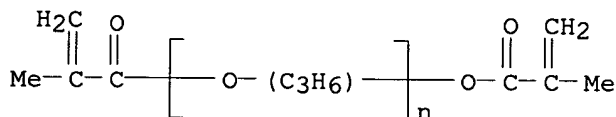
RL: IMF (Industrial manufacture); POF (Polymer in formulation);
TEM (Technical or engineered material use); PREP (Preparation);
USES (Uses)
(polymeric structural support membrane)

RN 308285-17-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2,3-propanetriol, polymer with butyl 2-propenoate, ethenylbenzene and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl) oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

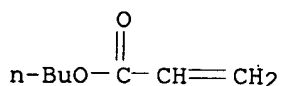
CM 1

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



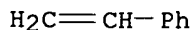
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 100-42-5
CMF C8 H8

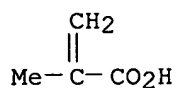


CM 4

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

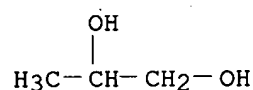
CM 5

CRN 79-41-4
CMF C4 H6 O2



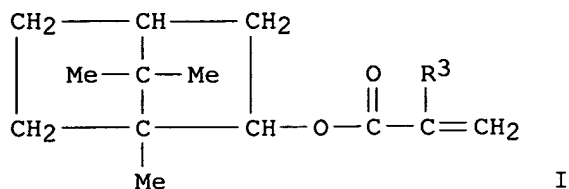
CM 6

CRN 57-55-6
CMF C3 H8 O2



L53 ANSWER 12 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:610602 HCAPLUS
DN 131:244273
TI Polymerizable (meth)acrylate composition for **optical lens** uses
IN Nishitake, Toshihiro; Imura, Satoshi
PA Tokuyama Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G02C007-02
ICS C08F002-50; C08F004-32; C08F220-10; C08F220-28; C08F220-30;
C08F290-06; G02B001-04
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 35, 73
FAN.CNT 1

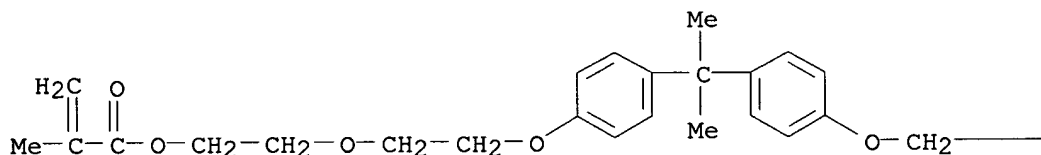
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 11258552 | A2 | 19990924 | JP 1998-63018 | 19980313 |
| PRAI | JP 1998-63018 | | 19980313 | | |
| GI | | | | | |



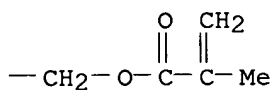
- AB Title compn., which is light-wt., rapidly curable, and easy in use, consists of (A) 100 parts of monomers comprising (A1) two-functional (meth)acrylate monomer represented by the formula of $\text{H}_2\text{C}:\text{C}(\text{R}_1)\text{CO}[\text{OCH}(\text{R}_2)\text{CH}_2]_a\text{O}-p-\text{C}_6\text{H}_4\text{C}(\text{Me})_2-p-\text{C}_6\text{H}_4\text{O}[\text{CH}_2\text{CH}(\text{R}_2)\text{O}]_b\text{COC}(\text{R}_1):\text{CH}_2$ ($\text{R}_1, \text{R}_2: \text{H, Me}$; a, b : integer 1-2; $a + b = 2-3$) 100, (A2) single-functional (meth)acrylate monomer represented by the formula of I ($\text{R}_3: \text{H, Me}$) 5-70, and (A3) propylene glycol di(meth)acrylate monomer represented by the formula of $\text{H}_2\text{C}:\text{C}(\text{R}_4)\text{COO}[\text{CH}(\text{Me})\text{CH}_2\text{O}]_c[\text{CH}_2\text{CH}(\text{Me})\text{O}]_d\text{COC}(\text{R}_4):\text{CH}_2$ ($\text{R}_4: \text{H, Me}$; c, d : integer 1-12; $c + d = 3-15$) 10-100 parts, (B) 0.005-1 part of (di)acylphosphine oxide photoinitiators, and (C) 0.01-5 parts of thermal polymn. initiators (decompn. temp. 70.degree.-90.degree.), and is pre-polymd. by irradiation and heated to give the cured products. Thus, a 4:1 mixt. of 2,2-bis(4-methacryloyloxyethoxyphenyl)propane and 2-(4-methacryloyloxyethoxyphenyl)-2-(4-methacryloylethoxyethoxyphenyl)propane 70, isobornyl methacrylate 10, poly(propylene glycol) dimethacrylate 20, bis(2,6-dimethoxybenzoyl)-2,4,4-trimethylpentylphosphine oxide 0.02, and tert-Bu peroxy-2-ethylhexanoate (Perbutyl IB) 0.5 part were blended, poured into a glass mold, irradiated with UV on both sides, and heated to 110.degree. for 1 h to give a **lens** showing refractive index 1.549, sp. gr. 1.18, good impact and heat resistance, low **optical** strain and profile irregularity, and good dyeability.
- ST curable acrylate polymer compn **optical lens**;
methacryloyloxyethoxyphenylpropane methacryloyloxyethoxyethoxyphenylpropane polymer **optical lens**; isobornyl methacrylate polymer **optical lens**; polypropylene glycol dimethacrylate polymer **optical lens**; acylphosphine oxide photoinitiator acrylate polymer **optical lens**
- IT Polymerization
Polymerization catalysts
(photopolymn.; prepn. of polymerizable (meth)acrylate compn. for **optical lens**)
- IT Refractive index
(prepn. and properties of polymerizable (meth)acrylate compn. for **optical lens**)
- IT **Lenses**
Optical materials
(prepn. of polymerizable (meth)acrylate compn. for **optical lens**)
- IT Polymerization catalysts
(thermal; prepn. of polymerizable (meth)acrylate compn. for **optical lens**)
- IT 75980-60-8, 2,4,6-Trimethylbenzoyldiphenylphosphine oxide 145052-34-2, Bis(2,6-dimethoxybenzoyl)(2,4,4-trimethylpentyl)phosphine oxide 162881-26-7, Bis(2,4,6-trimethylbenzoyl)phenylphosphine oxide
RL: CAT (Catalyst use); USES (Uses)
(photoinitiator; prepn. of polymerizable (meth)acrylate compn. for

optical lens)
 IT 244097-93-6P 244097-94-7P 244097-95-8P
 244097-96-9P 244097-97-0P
 RL: DEV (Device component use); IMF (Industrial manufacture);
 PRP (Properties); **PREP (Preparation)**; USES (Uses)
 (prepn. of polymerizable (meth)acrylate compn. for optical
 lens)
 IT 109-13-7, Perbutyl IB 22288-43-3, Perocta O 26748-41-4, Perbutyl ND
 RL: CAT (Catalyst use); USES (Uses)
 (thermal polymn. initiator; prepn. of polymerizable (meth)acrylate
 compn. for optical lens)
 IT 244097-93-6P 244097-94-7P 244097-95-8P
 244097-97-0P
 RL: DEV (Device component use); IMF (Industrial manufacture);
 PRP (Properties); **PREP (Preparation)**; USES (Uses)
 (prepn. of polymerizable (meth)acrylate compn. for optical
 lens)
 RN 244097-93-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-
 ethanediyl) ester, polymer with 2-[4-[1-methyl-1-[4-[2-[2-[(2-methyl-1-oxo-
 2-propenyl)oxy]ethoxy]ethoxy]phenyl]ethyl]phenoxy]ethyl
 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
 methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and
 rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-
 propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 65133-66-6
 CMF C29 H36 O7

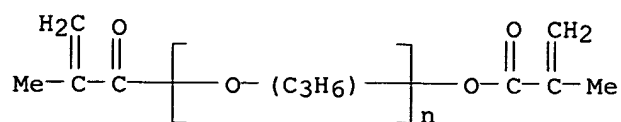
PAGE 1-A



PAGE 1-B



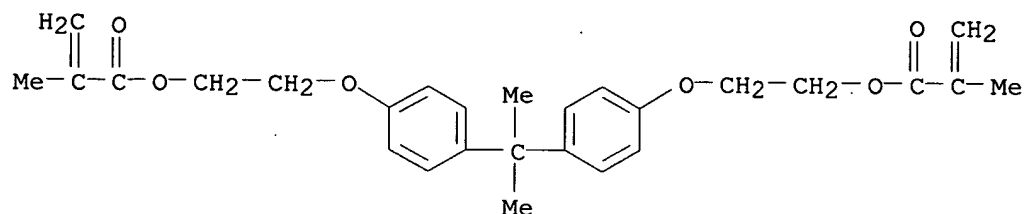
CM 2
 CRN 25852-49-7
 CMF (C3 H6 O)n C8 H10 O3
 CCI IDS, PMS



CM 3

CRN 24448-20-2

CMF C27 H32 O6

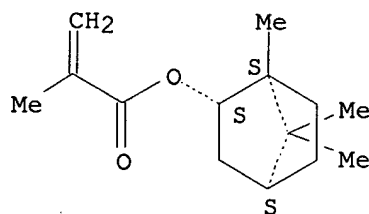


CM 4

CRN 7534-94-3

CMF C14 H22 O2

Relative stereochemistry.



RN 244097-94-7 HCAPLUS

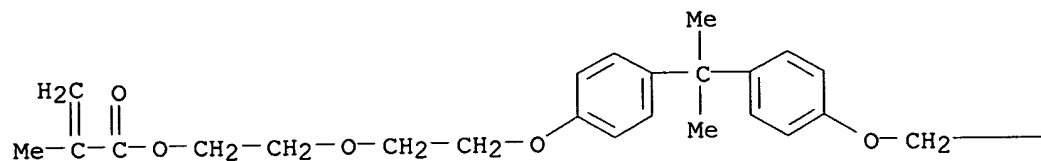
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 2-[4-[1-methyl-1-[4-[2-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]ethoxy]phenyl]ethyl]phenoxy]ethyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

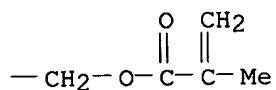
CRN 65133-66-6

CMF C29 H36 O7

PAGE 1-A



PAGE 1-B

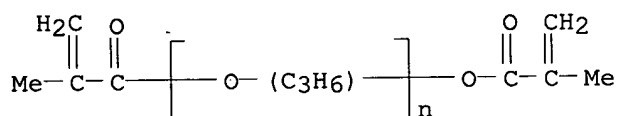


CM 2

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

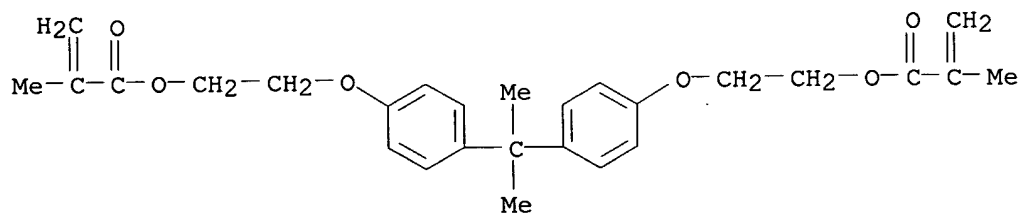
CCI IDS, PMS



CM 3

CRN 24448-20-2

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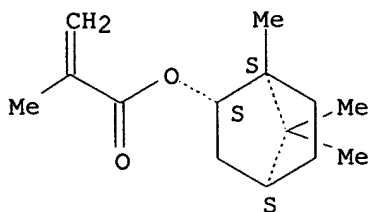


CM 4

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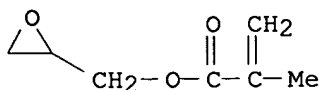
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Relative stereochemistry.



CM 5

CRN 106-91-2
CMF C7 H10 O3

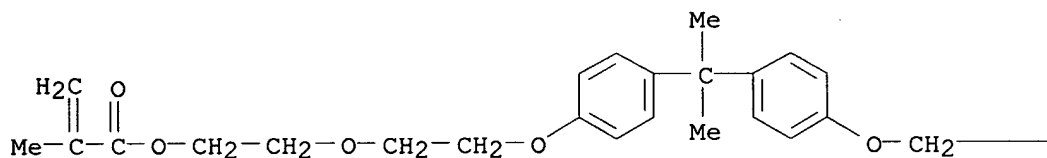


RN 244097-95-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 2-[4-[1-methyl-1-[4-[2-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]ethoxy]phenyl]ethyl]phenoxy]ethyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

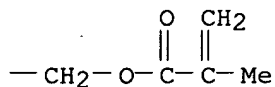
CM 1

CRN 65133-66-6
CMF C29 H36 O7

PAGE 1-A

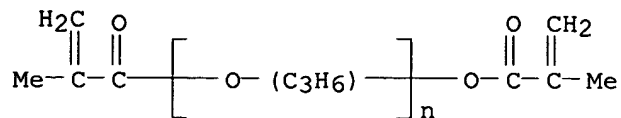


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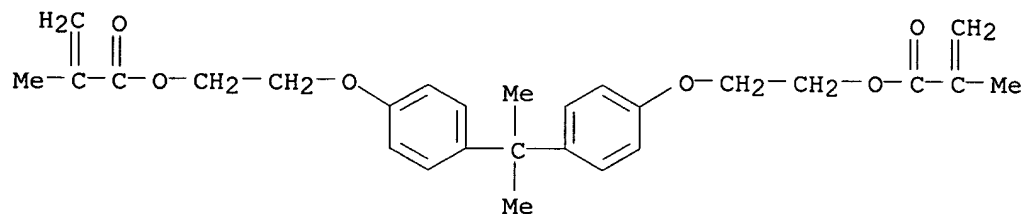
CM 2

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 3

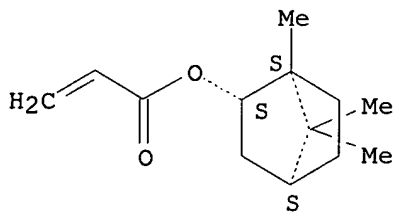
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 CMF C27 H32 O6



CM 4

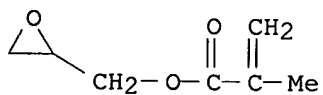
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 CMF C13 H20 O2

Relative stereochemistry.



CM 5

CRN 106-91-2
 CMF C7 H10 O3



RN 244097-97-0 HCAPLUS
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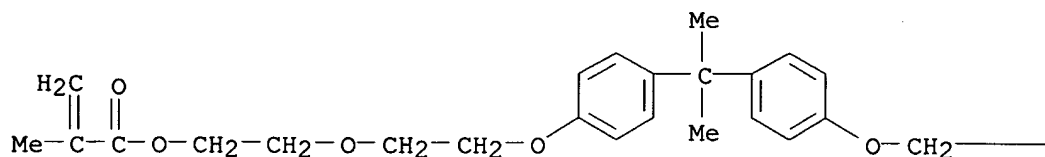
ethanediyl) ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-[4-[1-methyl-1-[4-[2-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]ethoxy]phenyl]ethyl]phenoxy]ethyl 2-methyl-2-propenoate, .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

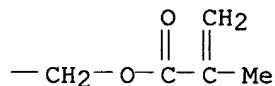
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CMF C29 H36 O7

PAGE 1-A



PAGE 1-B

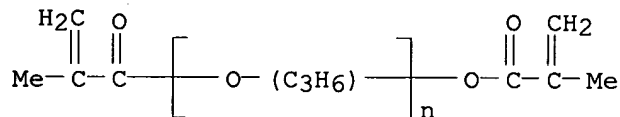


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

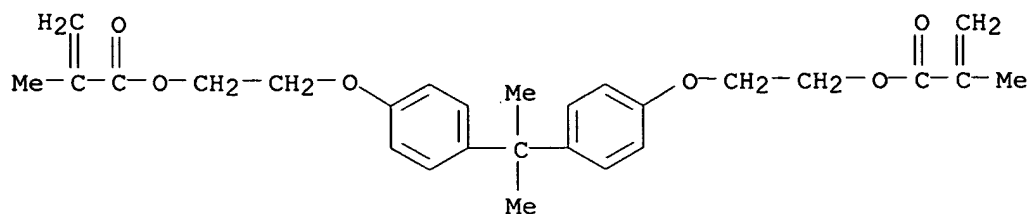
CCI IDS, PMS



CM 3

CRN 24448-20-2

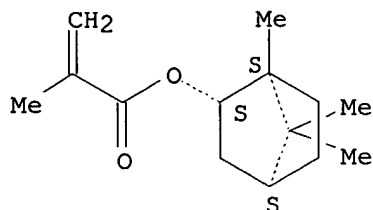
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CM 4

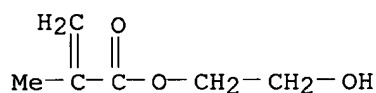
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



CM 5

CRN 868-77-9
CMF C6 H10 O3



L53 ANSWER 13 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:576962 HCAPLUS
DN 131:201048
TI Polymeric photosensitive films having controlled viscosity response to
temperature and shear
IN Foreman, Thomas Kevin; McKeever, Mark Robert
PA E. I. du Pont de Nemours and Co., USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
IC C08F020-02; C08F020-04; C08F020-06; C08F020-54; C08F029-56; C08F120-02;
C08F120-04; C08F120-06; C08F120-54; C08F120-56
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

PI WO 9945045 A1 19990910 WO 1999-US4820 19990305
W: CN, JP, KR
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
EP 1058697 A1 20001213 EP 1999-911130 19990305
R: DE, FR, GB, IT
US 2001051689 A1 20011213 US 2001-891642 20010626
US 6548602 B2 20030415
PRAI US 1998-35454 A 19980305
US 1999-260835 A1 19990302
WO 1999-US4820 W 19990305
AB A polymeric film compn., which resists creep at room temp., even when a
sheet/film combination is stored as a roll, has a viscosity of $\geq 3 \times 10^6$ Pa-s at a predetd. first lower temp. and at a shear stress 10,000 Pa
and a viscosity $\geq 1 \times 10^4$ Pa-s at a predetd. second higher temp. and
at a shear stress 50,000 Pa. The film binder is a comb and/or linear
polymer having hydrogen bonding functionality, **optionally**
silica, unsatd. compd. and photoinitiator. A Bu acrylate-methacrylic
acid-Me acrylate-Me methacrylate-styrene graft copolymer, having 50/50
methacrylic acid-Me methacrylate macromer arms (mol. wt. 3400), film had
nonlinear viscosity decrease (85-95.degree.) and shear stress viscosity
(25,000 Pa, <55.degree.) $> 1 \times 10^7$ Pa-s.
ST acrylate graft copolymer film viscosity shear temp dependence; methacrylic
acid methyl methacrylate styrene graft copolymer; linear polymer blend
graft copolymer film; photosensitive film rheol shear temp dependence
IT Polyoxyalkylenes, uses
RL: POF (Polymer in formulation); USES (Uses)
(films having controlled viscosity response to temp. and shear)
IT Coating materials
(light-sensitive, of graft and/or linear polymer; and films having
controlled viscosity response to temp. and shear)
IT Flow
(non-Newtonian; and films having controlled viscosity response to temp.
and shear)
IT 130856-24-5P, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene
graft copolymer 241824-58-8P, Butyl acrylate-methacrylic acid-methyl
acrylate-methyl methacrylate-styrene graft copolymer 241824-61-3P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)
(films having controlled viscosity response to temp. and shear)
IT 7631-86-9, Silica, uses
RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or
engineered material use); USES (Uses)
(films having controlled viscosity response to temp. and shear)
IT 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid)
9003-20-7, Poly(vinyl acetate) 24980-41-4, Poly(caprolactone)
25087-26-7, Poly(methacrylic acid) 25248-42-4, Poly(caprolactone)
25322-68-3 25322-69-4
RL: POF (Polymer in formulation); USES (Uses)
(films having controlled viscosity response to temp. and shear)
IT 9003-39-8, Poly(N-vinylpyrrolidone)
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
engineered material use); USES (Uses)
(films having controlled viscosity response to temp. and shear)
IT **241824-59-9P 241824-60-2P 241824-62-4P**
RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)

(photosensitive and photodeveloped; films having controlled viscosity response to temp. and shear)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Jarrin; US 5324779 A 1994 HCAPLUS
- (2) Milkovich; US 3879494 A 1975 HCAPLUS
- (3) Pfirrmann; US 5693717 A 1997 HCAPLUS

IT 241824-59-9P 241824-62-4P

RL: IMF (Industrial manufacture); PRP (Properties); TEM
(Technical or engineered material use); PREP (Preparation); USES
(Uses)

(photosensitive and photodeveloped; films having controlled viscosity response to temp. and shear)

RN 241824-59-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], methyl 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

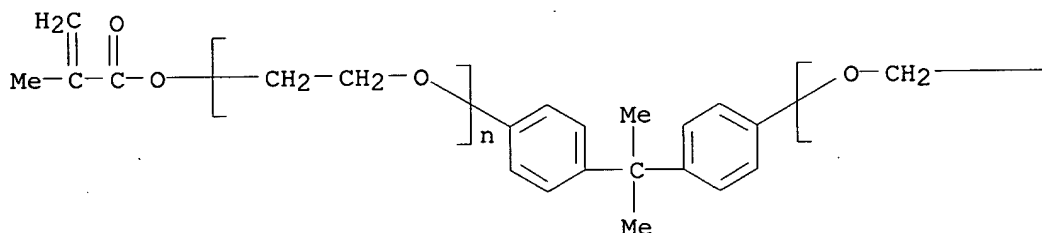
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CRN 41637-38-1

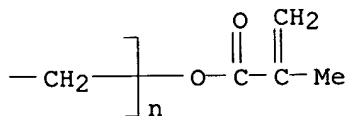
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CCI PMS

PAGE 1-A



PAGE 1-B



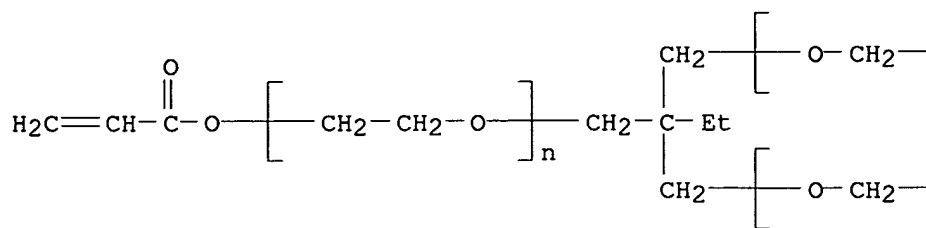
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CRN 28961-43-5

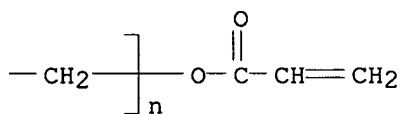
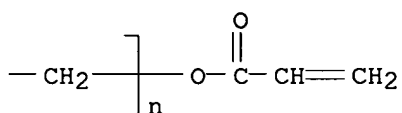
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CCI PMS

PAGE 1-A



PAGE 1-B

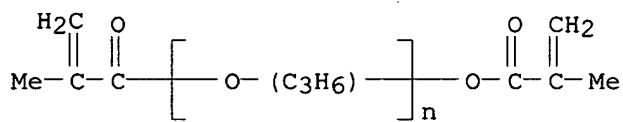


CM 3

CRN 25852-49-7

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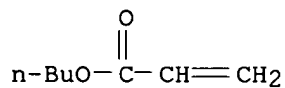
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CM 4

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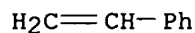
CMF C7 H12 O2



CM 5

CRN 100-42-5

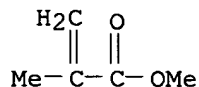
CMF C8 H8



CM 6

CRN 80-62-6

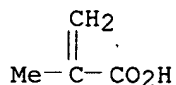
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CM 7

CRN 79-41-4

CMF C4 H6 O2



RN 241824-62-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), methyl 2-methyl-2-propenoate and .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

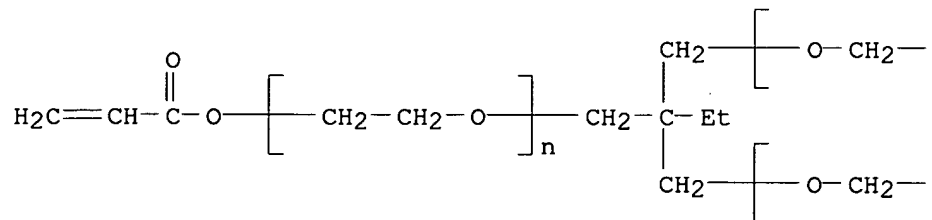
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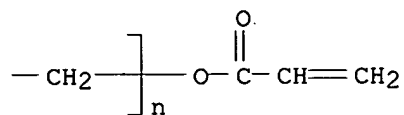
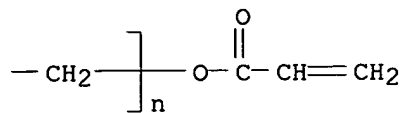
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CCI PMS

PAGE 1-A



PAGE 1-B

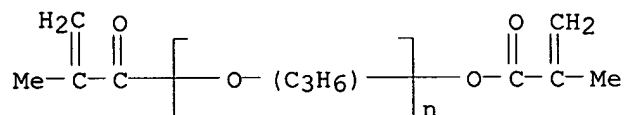


CM 2

CRN 25852-49-7

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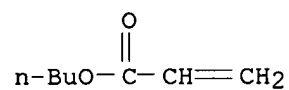
CCI IDS, PMS



CM 3

CRN 141-32-2

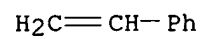
CMF C7 H12 O2



CM 4

CRN 100-42-5

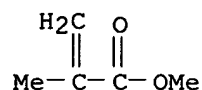
CMF C8 H8



CM 5

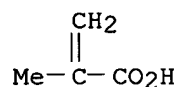
CRN 80-62-6

CMF C5 H8 O2



CM 6

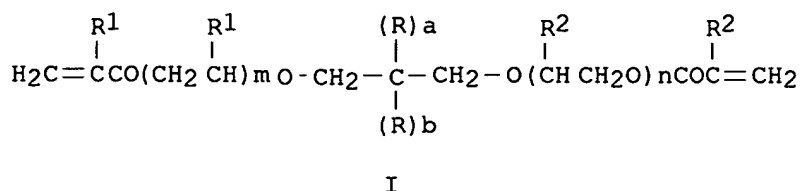
CRN 79-41-4
CMF C4 H6 O2



L53 ANSWER 14 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:64844 HCAPLUS
DN 130:139781
TI Polymerizable monomer compositions, transparent polymer substrates, and resulting **optical** and ophthalmologic articles
IN Widawski, Gilles; Cano, Jean-Paul; Magne, Jean-Francois
PA Essilor International Compagnie Generale d'Optique, Fr.
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA French
IC ICM C08F222-10
ICS C08F220-28; C08F220-30; G02B001-04
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9902574 | A1 | 19990121 | WO 1998-FR1421 | 19980703 |
| | W: AU, CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | FR 2765583 | A1 | 19990108 | FR 1997-8614 | 19970707 |
| | FR 2765584 | A1 | 19990108 | FR 1997-9733 | 19970730 |
| | FR 2765584 | B1 | 19991022 | | |
| | AU 9884460 | A1 | 19990208 | AU 1998-84460 | 19980703 |
| | AU 731071 | B2 | 20010322 | | |
| | EP 925315 | A1 | 19990630 | EP 1998-935088 | 19980703 |
| | EP 925315 | B1 | 20021127 | | |
| | R: DE, ES, FR, GB, IT | | | | |
| | JP 2001500566 | T2 | 20010116 | JP 1999-508232 | 19980703 |
| | US 2002107350 | A1 | 20020808 | US 2001-996282 | 20011128 |
| PRAI | FR 1997-8614 | A | 19970707 | | |
| | FR 1997-9733 | A | 19970730 | | |
| | WO 1998-FR1421 | W | 19980703 | | |
| | US 1999-254503 | B1 | 19990305 | | |
| GI | | | | | |



AB The invention concerns polymerizable monomer compns., transparent polymer substrates, and resulting **optical** and ophthalmol. articles, comprising 30-100% monomers I in which: R1, R2, R' and R" represent, independently of one another, a hydrogen atom or a Me radical, Ra and Rb, identical or different, represent each a C1-10 alkyl group, provided that Ra and Rb do not simultaneously represent a Me group and m and n are whole nos. satisfying the relationship $2m + n \geq 20$; 0-70% of at least another polymerizable monomer comprising one or several (meth)acrylate functions, different from I, such that a transparent substrate resulting from polymn. of the compn. has a glass temp. 70-110.degree.; and a polymn. initiation system. The invention is applicable to the manuf. of **optical** and ophthalmol. articles.

ST propoxylated ethylbutylpropanediol dimethacrylate polymer **optical** material; ophthalmol acrylic polymer

IT **Lenses**

Optical instruments

Transparent materials

(polymerizable monomer compns., transparent polymer substrates, and resulting **optical** and ophthalmol. articles)

IT 219993-42-7P 219993-44-9P 219993-46-1P 219993-47-2P
219993-48-3P 219993-50-7P 219993-53-0P 219993-55-2P
219993-56-3P 219993-57-4P

RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)

(polymerizable monomer compns., transparent polymer substrates, and resulting **optical** and ophthalmol. articles)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ciba Geigy Ag; EP 0378144 A 1990 HCAPLUS
- (2) Essilor Int; FR 2699541 A 1994 HCAPLUS
- (3) Mitsubishi Rayon Co; EP 0376254 A 1990 HCAPLUS
- (4) Perstorp Ab; WO 9511219 A 1995 HCAPLUS
- (5) Tokuyasu Corp; EP 0691550 A 1996 HCAPLUS
- (6) Toshiyasu, K; US 5583191 A 1996 HCAPLUS

IT 219993-44-9P 219993-47-2P 219993-53-0P
219993-55-2P 219993-57-4P

RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)

(polymerizable monomer compns., transparent polymer substrates, and resulting **optical** and ophthalmol. articles)

RN 219993-44-9 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2-butyl-2-ethyl-1,3-propanediyl)bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and .alpha.'-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-

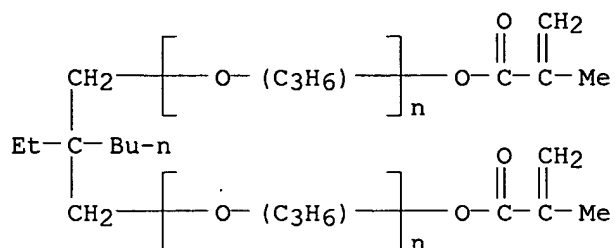
propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 179670-66-7

$$\text{CMF} \quad (\text{C}_3 \text{ H}_6 \text{ O})_n \quad (\text{C}_3 \text{ H}_6 \text{ O})_n \quad \text{C}_{17} \text{ H}_{28} \text{ O}_4$$

CCI IDS, PMS



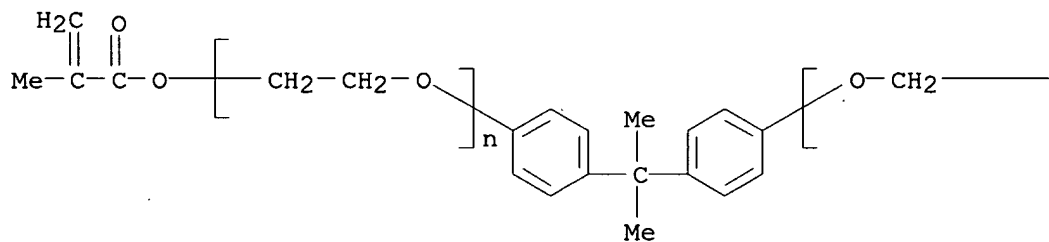
CM 2

CRN 41637-38-1

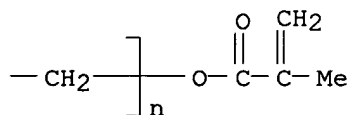
$$\text{CMF} \quad (\text{C}_2 \text{ H}_4 \text{ O})_n \quad (\text{C}_2 \text{ H}_4 \text{ O})_n \quad \text{C}_{23} \text{ H}_{24} \text{ O}_4$$

| | |
|-----|-----|
| CCI | PMS |
|-----|-----|

PAGE 1-A



PAGE 1-B

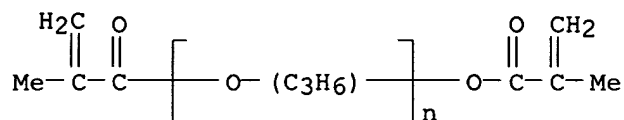


CM 3

CRN 25852-49-7

$$\text{CMF} \quad (\text{C}_3 \text{ H}_6 \text{ O})_n \text{ C}_8 \text{ H}_{10} \text{ O}_3$$

CCI IDS, PMS



RN 219993-47-2 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2-butyl-2-ethyl-1,3-propanediyl)bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with cN 131 and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 201615-26-1

CMF Unspecified

CCI PMS, MAN

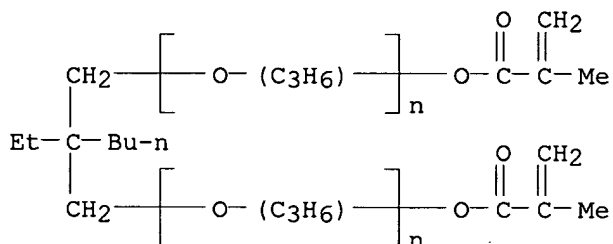
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 179670-66-7

CMF (C3 H6 O)n (C3 H6 O)n C17 H28 O4

CCI IDS, PMS

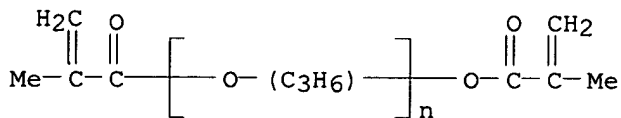


CM 3

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

CCI IDS, PMS



RN 219993-53-0 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2-butyl-2-ethyl-1,3-propanediyl)bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)

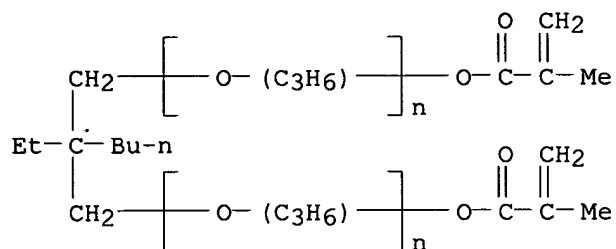
and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 179670-66-7

CMF (C3 H6 O)_n (C3 H6 O)_n C17 H28 O4

CCI IDS, PMS



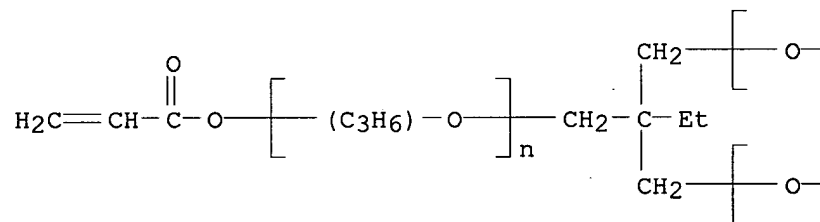
CM 2

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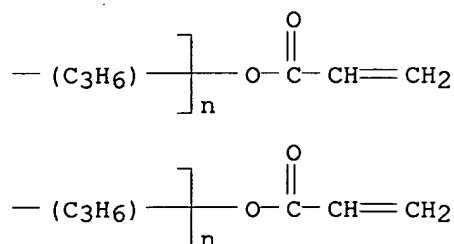
CMF (C3 H6 O)_n (C3 H6 O)_n (C3 H6 O)_n C15 H20 O6

CCI IDS, PMS

PAGE 1-A



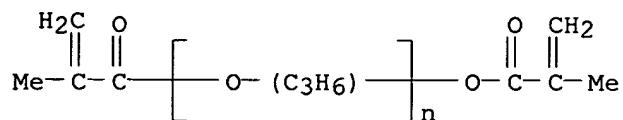
PAGE 1-B



CM 3

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



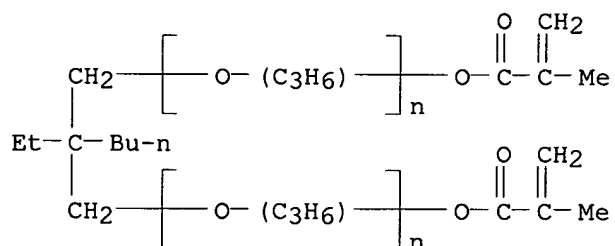
RN 219993-55-2 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2-butyl-2-ethyl-1,3-propanediyl)bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with .alpha.-hydro-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 179670-66-7

CMF (C3 H6 O)_n (C3 H6 O)_n C17 H28 O4
 CCI IDS, PMS

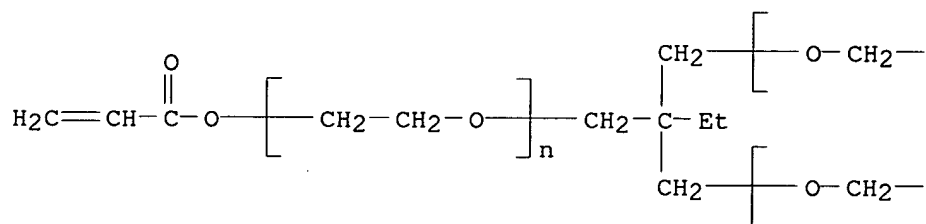


CM 2

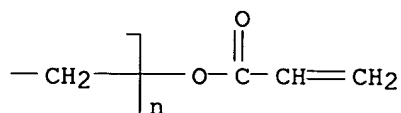
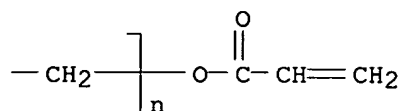
CRN 28961-43-5

CMF (C2 H4 O)_n (C2 H4 O)_n (C2 H4 O)_n C15 H20 O6
 CCI PMS

PAGE 1-A



PAGE 1-B

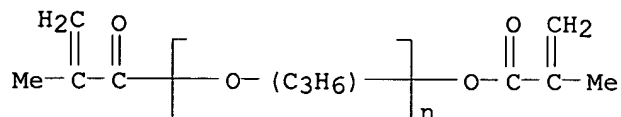


CM 3

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



RN 219993-57-4 HCAPLUS

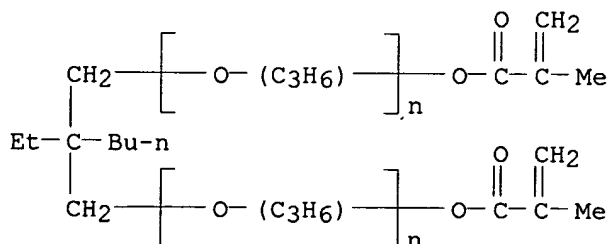
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2-butyl-2-ethyl-1,3-propanediyl)bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 179670-66-7

CMF (C3 H6 O)_n (C3 H6 O)_n C17 H28 O4

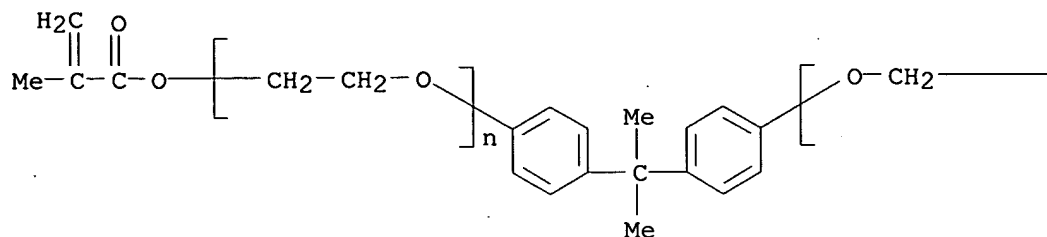
CCI IDS, PMS



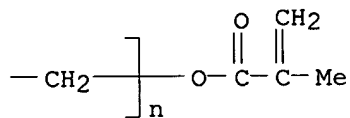
CM 2

CRN 41637-38-1
 CMF (C2 H4 O)_n (C2 H4 O)_n C23 H24 O4
 CCI PMS

PAGE 1-A

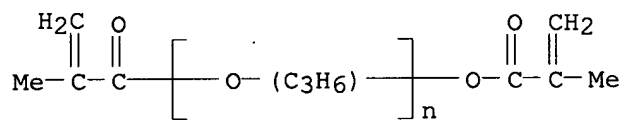


PAGE 1-B



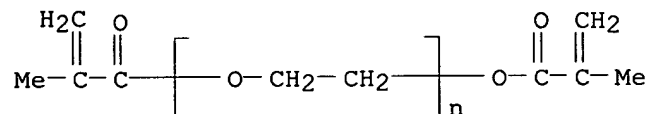
CM 3

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 4

CRN 25852-47-5
 CMF (C2 H4 O)_n C8 H10 O3
 CCI PMS



L53 ANSWER 15 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1999:56753 HCAPLUS
 DN 130:160364

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

TI Epoxy (meth)acrylate-based composition, **optical** resin from it,
and plastic **lense** made of it
IN Iryo, Takeaki; Kubota, Satoshi; Mogami, Takao
PA Seiko Epson Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G02B001-04
ICS C08F020-38; G02C007-02
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related
Properties)
Section cross-reference(s): 38, 62

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--------------|--------------|---|---|
| PI | JP 11014802 | A2 | 19990122 | JP 1997-170369 | 19970626 |
| PRAI | JP 1997-170369 | | 19970626 | | |
| AB | The compn. mainly contains an epoxy (meth)acrylate obtained from an epoxy compd. [GS(R1S)mR2nC6H4]2S (G = glycidyl; R1, R2 = C1-10 hydrocarbon, m, n = 0-5). The optical resin is obtained by radical polymn. of the above compn. The plastic lense made of the above resin is also claimed. The resin shows high refractive index and mech. strength and good heat resistance. | | | | |
| ST | epoxy methacrylate optical polymer radical polymn; plastic lense epoxy acrylate polymer; refractive index epoxy acrylic polymer lense | | | | |
| IT | Epoxy resins, uses RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses) (acrylates; plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) | | | | |
| IT | Epoxy resins, uses RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic; plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) | | | | |
| IT | Lenses Optical materials (plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) | | | | |
| IT | Polymerization (radical; plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) | | | | |
| IT | 135470-03-0P | 220174-88-9P | 220174-90-3P | RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (copolymn. of; plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) | |
| IT | 220174-85-6P | 220174-86-7P | 220174-87-8P | 220174-89-0P | 220174-91-4P RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (plastic lense from epoxy (meth)acrylate-based compn. by radical polymn.) |
| IT | 220174-91-4P RL: DEV (Device component use); PNU (Preparation, unclassified); TEM | | | | |

(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)

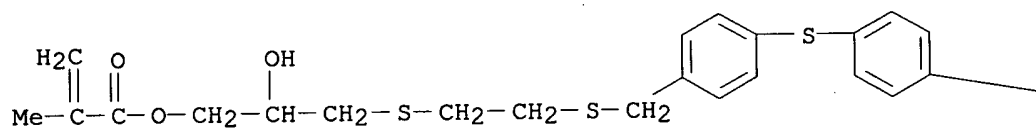
(plastic lense from epoxy (meth)acrylate-based compn. by
radical polymn.)

RN 220174-91-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], 2-phenoxyethyl 2-methyl-2-propenoate and thiobis[4,1-phenylenemethylenethio-2,1-ethanediylthio(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

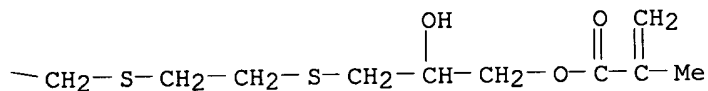
CM 1

CRN 220174-90-3
CMF C32 H42 O6 S5

PAGE 1-A

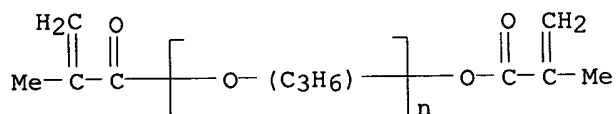


PAGE 1-B



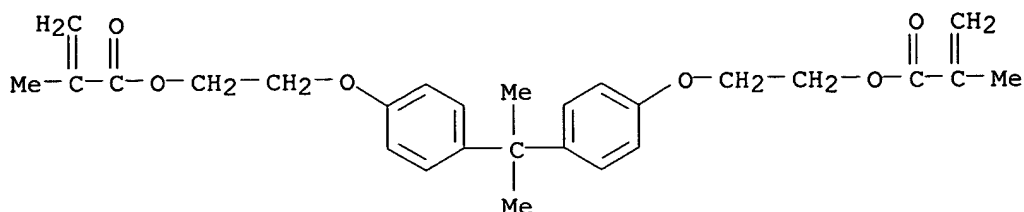
CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



CM 3

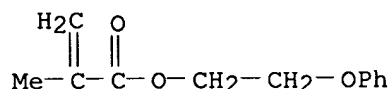
CRN 24448-20-2
CMF C27 H32 O6



CM 4

CRN 10595-06-9

CMF C12 H14 O3



L53 ANSWER 16 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:711252 HCAPLUS

DN 130:14300

TI **Optical** polymer having a high refractive index and high Abbe number prepared by radical polymerization using 2,5-bis(2-thia-3-butenyl)-1,4-dithiane

AU Okubo, Tsuyoshi; Kohmoto, Shigeo; Yamamoto, Makoto

CS Graduate School of Science and Technology, Chiba University, Chiba, 263, Japan

SO Journal of Macromolecular Science, Pure and Applied Chemistry (1998), A35(11), 1819-1834

CODEN: JSPCE6; ISSN: 1060-1325

PB Marcel Dekker, Inc.

DT Journal

LA English

CC 35-4 (Chemistry of Synthetic High Polymers)

AB Novel poly(vinyl sulfide)s were prepd. by addn. polymn. using 2,5-bis(2-thia-3-butenyl)-1,4-dithiane (TBD) with a radical initiator for an **optical** polymer having a high refractive index (nD) and Abbe no. (.nu.). Homopolymn. of TBD (72.9% conversion) and copolymn. with acrylonitrile or acrylates having nonpolar groups (50.4-81.3% conversion according to the comonomers used) in a limited compn. range yielded hard and transparent polymers suitable for application in **optics**. The methacrylates used yielded no polymeric product as a result of the copolymn. The obtained polymers had glass transition temp., Tg, nD and .nu. ranging between 41.0.degree.-124.0.degree., 1.678-1.546 and 34.1-43.8, resp., except that poly(TBD) did not exhibit Tg below 200.degree., and it had the highest nD. Most of the polymers have higher nD and .nu. than those of other conventional **optical** polymers and moreover, their values are comparable to those of flint glasses. The copolymerizability of TBD and the group contribution to nD and .nu. are discussed based on the Q-e scheme and on the Lorentz-Lorenz equation, resp. TBD serves as a useful material for the prepn. of polymers having high nD and .nu. along with a Tg of more than 100.degree., and that the polymers thus obtained are promising **optical** materials.

- ST **optical** polymer bisthiabutenyldithiane; polyvinyl sulfide
optical polymer
- IT Glass transition temperature
 Refractive index
 Thermomechanical properties
 Transparency
 (of **optical** polymer having a high refractive index and high Abbe no. prepd. by radical polymn. of 2,5-bis(2-thia-3-butenyl)-1,4-dithiane)
- IT 4419-11-8, 2,2'-Azobis(2,4-dimethylvaleronitrile)
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst; prepn. of **optical** polymers having high refractive index and high Abbe no. by radical polymn. using 2,5-bis(2-thia-3-butenyl)-1,4-dithiane in presence of)
- IT 61704-46-9P 136122-15-1P, 2,5-Bis(mercaptomethyl)-1,4-dithiane
 147310-29-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; in prepn. of monomer for synthesis of **optical** polymers having high refractive index and high Abbe no.)
- IT 152704-93-3P, 2,5-Bis(2-thia-3-butenyl)-1,4-dithiane
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; for synthesis of **optical** polymers having high refractive index and high Abbe no.)
- IT 216093-71-9P 216093-73-1P 216093-74-2P 216093-75-3P
 216093-76-4P 216093-78-6P 216093-79-7P 216093-80-0P
 216093-82-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of **optical** polymers having high refractive index and high Abbe no. by radical polymn. of 2,5-bis(2-thia-3-butenyl)-1,4-dithiane)
- IT 152704-94-4P, 2,5-Bis(2-thia-3-butenyl)-1,4-dithiane homopolymer
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of **optical** polymers having high refractive index and high Abbe no. by radical polymn. using 2,5-bis(2-thia-3-butenyl)-1,4-dithiane)
- IT 62-56-6, Thiourea, reactions 593-60-2, Vinyl bromide 2179-57-9, Allyl disulfide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant; in prepn. of monomer for synthesis of **optical** polymers having high refractive index and high Abbe no.)

RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
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IT 216093-76-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP
(Preparation)

(prepn. of optical polymers having high refractive index and
high Abbe no. by radical polymn. of 2,5-bis(2-thia-3-butenyl)-1,4-
dithiane)

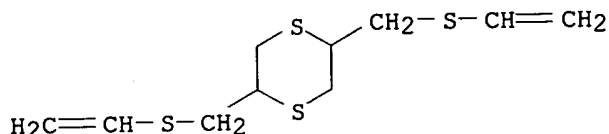
RN 216093-76-4 HCAPLUS

CN 2-Propenoic acid, 1,3-propanediyl ester, polymer with 2,5-
bis[(ethenylthio)methyl]-1,4-dithiane (9CI) (CA INDEX NAME)

CM 1

CRN 152704-93-3

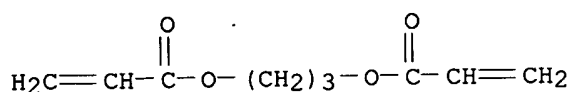
CMF C10 H16 S4



CM 2

CRN 24493-53-6

CMF C9 H12 O4



L53 ANSWER 17 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:498654 HCAPLUS

DN 129:176464

TI Curable transparent polymer compositions and cured products thereof with excellent weather resistance and low water absorption

IN Watanabe, Takashi; Hatazawa, Takenobu

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F290-06

ICS G02B001-04

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 10204132 | A2 | 19980804 | JP 1997-12621 | 19970127 |
| PRAI | JP 1997-12621 | | 19970127 | | |

AB Title compns., useful for **optical** materials, etc., contain (a) binder polymers $\text{H}_2\text{C}:\text{CMeCO}_2(\text{CHMeCH}_2\text{O})_m(\text{CH}_2\text{CHMeO})_n\text{OCMe}:\text{CH}_2$ ($m + n = 3-14$), (b) $\text{H}_2\text{C}:\text{CMeCO}_2\text{R}_1$ ($\text{R}_1 = \text{C}_{1\text{to}20}$ aliph. or alicyclic hydrocarbon group, arom. hydrocarbon group), $\text{H}_2\text{C}:\text{CHCO}_2\text{R}_1$, and/or $\text{H}_2\text{C}:\text{CHR}_2$ ($\text{R}_2 = \text{cyano, arom. hydrocarbon group}$), and (c) polymn. initiators at $b/(a + b) = (20-60)/100$. Thus, a curable polymer compn. contg. nonapropylene glycol dimethacrylate 60, Me methacrylate 20, styrene 20, and 1-hydroxycyclohexyl Ph ketone 0.5 part was cured under UV in a 15-mm gap between glass spacers to show cure time 3 min t give a test piece showing total light transmittance 92%, water absorption 0.25% (JIS K 7209), and Rockwell hardness (M scale) 90 (JIS K 7202).

ST rapidly curable transparent methacrylate ester compn; acrylate ester curable transparent compn; vinyl compd curable transparent compn; nonapropylene glycol dimethacrylate curable compn; methyl methacrylate styrene copolymer; UV curable transparent methacrylate compn; weatherability UV curable methacrylate ester compn; water absorption methacrylate ester polymer

IT Transparent materials

Weathering

(rapidly curable acrylic resin compns. giving transparent products with improved weatherability and low water absorption)

IT 181868-72-4P, Methyl methacrylate-nonapropylene glycol dimethacrylate copolymer **211379-98-5P**, Cyclohexyl methacrylate-polypropylene glycol dimethacrylate copolymer **211379-99-6P**

211380-00-6P, Cyclohexyl methacrylate-diethylene glycol ethyl ether acrylate-polypropylene glycol dimethacrylate copolymer

211380-01-7P, Methyl methacrylate-polypropylene glycol dimethacrylate-styrene copolymer **211380-02-8P**

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(rapidly curable acrylic resin compns. giving transparent products with improved weatherability and low water absorption)

IT **211379-98-5P**, Cyclohexyl methacrylate-polypropylene glycol dimethacrylate copolymer **211379-99-6P** **211380-00-6P**, Cyclohexyl methacrylate-diethylene glycol ethyl ether acrylate-polypropylene glycol dimethacrylate copolymer **211380-01-7P**, Methyl methacrylate-polypropylene glycol dimethacrylate-styrene copolymer **211380-02-8P**

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(rapidly curable acrylic resin compns. giving transparent products with improved weatherability and low water absorption)

RN 211379-98-5 HCAPLUS

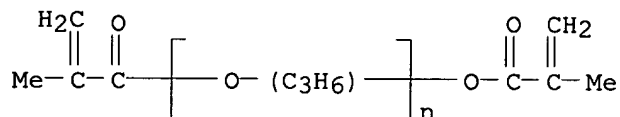
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

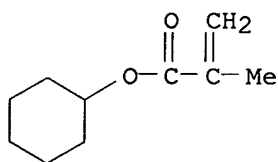
CCI IDS, PMS



CM 2

CRN 101-43-9

CMF C10 H16 O2



RN 211379-99-6 HCAPLUS

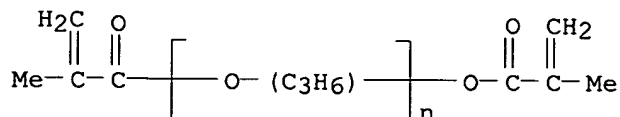
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with ethenylbenzene monomethyl deriv. and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS

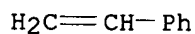


CM 2

CRN 1319-73-9

CMF C9 H10

CCI IDS

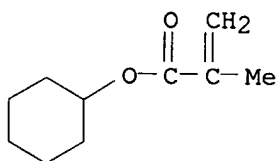


D1-Me

CM 3

CRN 101-43-9

CMF C10 H16 O2



RN 211380-00-6 HCAPLUS

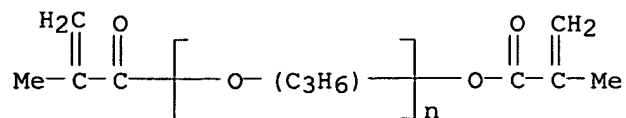
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with 2-(2-ethoxyethoxy)ethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

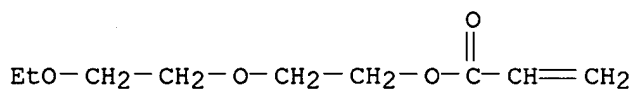
CCI IDS, PMS



CM 2

CRN 7328-17-8

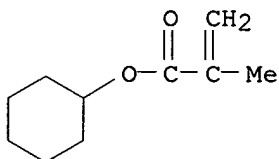
CMF C9 H16 O4



CM 3

CRN 101-43-9

CMF C10 H16 O2



RN 211380-01-7 HCAPLUS

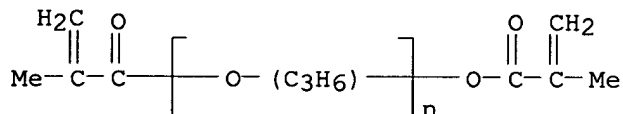
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

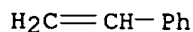
CCI IDS, PMS



CM 2

CRN 100-42-5

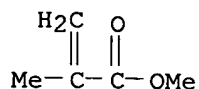
CMF C8 H8



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 211380-02-8 HCAPLUS

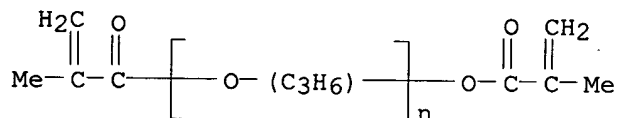
CN 2-Propenenitrile, polymer with ethenylbenzene and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



CM 2

CRN 107-13-1

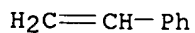
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



AN 1997:508736 HCAPLUS
 DN 127:165334
 TI Metal sheets post treated with organic resin-containing chemical
 conversion coating
 IN Nakazawa, Masato; Yoshida, Kengo
 PA Nippon Steel Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM B32B015-08
 ICS B05D003-10; B05D007-14; C23C022-28; C23C028-00
 CC 56-6 (Nonferrous Metals and Alloys)
 Section cross-reference(s): 42, 55

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | JP 09183186 | A2 | 19970715 | JP 1996-6 | 19960104 |
| PRAI | JP 1996-6 | | 19960104 | | |
| AB | Steel sheets (optionally having Zn- or Al-base coatings), Zn alloy sheets, or Al alloy sheets have 0.3-5 .mu.m thickness of chem. conversion treatment coatings contg. org. resins, wherein surficial C amt. in C-O-O bond is .gtoreq.25% of surficial C amt. in C-C bond (defined by XPS). The treated sheets show high paint adhesion, esp. secondary adhesion. | | | | |
| ST | metal chem conversion coating polymer mixt; steel conversion coating polymer addn; plated steel conversion coating polymer additive; zinc alloy conversion coating polymer additive; painting pretreatment metal conversion coating; aluminum alloy conversion coating polymer additive | | | | |
| IT | Chromates RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (conversion coating; metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | Coating process (conversion; metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | Galvanized steel RL: TEM (Technical or engineered material use); USES (Uses) (metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | Paintings (metal sheets having org. resin-contg. chem. conversion coatings for) | | | | |
| IT | 9003-01-4DP, Polyacrylic acid, acrylamide-modified 193693-79-7P RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (conversion coatings component; metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | 12597-69-2, Steel, uses RL: TEM (Technical or engineered material use); USES (Uses) (metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | 7440-66-6, Zinc, uses 42611-25-6, Aluminum 5, zinc 95 88120-60-9 RL: TEM (Technical or engineered material use); USES (Uses) (platings on steel; metal sheets having org. resin-contg. chem. conversion coatings) | | | | |
| IT | 193693-79-7P RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES | | | | |

(Uses)

(conversion coatings component; metal sheets having org. resin-contg. chem. conversion coatings)

RN 193693-79-7 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene, ethenylphenol and 1-methyl-1,2-ethanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 31257-96-2

CMF C8 H8 O

CCI IDS



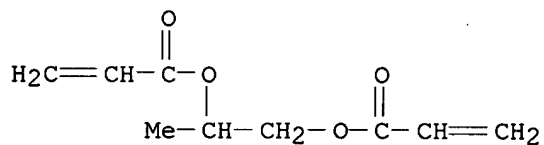
D1- OH

D1- CH=CH₂

CM 2

CRN 25151-33-1

CMF C9 H12 O4



CM 3

CRN 100-42-5

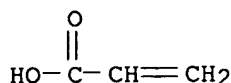
CMF C8 H8

H₂C=CH- Ph

CM 4

CRN 79-10-7

CMF C3 H4 O2



L53 ANSWER 19 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:96632 HCAPLUS

DN 126:105313

TI Acrylic syrup compositions and cold-resistant waterproof layers or joint materials therefrom

IN Yoshii, Jujiro; Aoki, Toshiichi

PA Mitsubishi Rayon Co, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F290-06

ICS C09K003-10

CC 39-4 (Synthetic Elastomers and Natural Rubber)

Section cross-reference(s): 42, 58

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 08301953 | A2 | 19961119 | JP 1995-138854 | 19950515 |
| PRAI | JP 1995-138854 | | 19950515 | | |

AB Tile compns. comprise (A) 25-70% Me methacrylate (I), (B) 10-40% monomers having 1 radically polymerizable double bond with glass-transition temp. (Tg) of their homopolymers .ltoreq.0.degree., (C)10-50% polyurethane-polyacrylates manufd. by polymn. of polyisocyanates having .gtoreq.2 NCO with OH-contg. (meth)acrylates, (D) 0-20% monomers having .gtoreq.2 radically polymerizable double bonds, (E) 0.1-5% paraffin waxes (m.p. 40-80.degree.), and **optionally** (F) polymn. catalysts and .ltoreq.30% plasticizers. Thus, 28.0 parts 1,4-butanediol-2-hydroxyethyl acrylate-polytetramethylene glycol-TDI copolymer was mixed with I 45.0, 2-ethylhexyl acrylate (Tg -68.degree.) 27.0, polypropylene glycol dimethacrylate 3.0, a paraffin wax (m.p. 55-65.degree.) 1.0, N,N'-dimethyl-p-toluidine 0.3, N,N'-di(2-hydroxypropyl)-p-toluidine 0.5, and 50% Bz202 3.0 parts to obtain a compn., which was applied on a primer-coated concrete road to form a load- and cold-resistant waterproof coating.

ST acrylic polyoxyalkylene polyurethane rubber water resistance; cold resistance waterproof acrylic coating; joint acrylic polyoxyalkylene polyurethane waterproof

IT Urethane rubber, preparation
Urethane rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, butanediol-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polypropylene glycol-polypropylene glycol dimethacrylate-TDI; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

IT Urethane rubber, preparation
Urethane rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

- (acrylic-polyoxyalkylene-; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Synthetic rubber, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (butanediol-di-ethylhexyl sebacate-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polypropylene glycol dimethacrylate-polytetramethylene glycol-TDI; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Synthetic rubber, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (butanediol-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polymethylene polyphenyl polyisocyanate-polypropylene glycol-polypropylene glycol dimethacrylate; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Synthetic rubber, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (butanediol-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polypropylene glycol dimethacrylate-polytetramethylene glycol-TDI; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Synthetic rubber, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (butanediol-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polytetramethylene glycol-TDI; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Synthetic rubber, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (butanediol-ethylhexyl sebacate-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polypropylene glycol-TDI-triethylene glycol dimethacrylate; cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Cold-resistant materials
 Construction materials
 Joints, mechanical
 (cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Hydrocarbon waxes, properties
 RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (cold-resistant acrylic syrup compns. for waterproof coatings or joints)
- IT Acrylic rubber
 Acrylic rubber
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyoxyalkylene-polyurethane-; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

IT Acrylic rubber
 Acrylic rubber
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (urethane, butanediol-ethylhexyl acrylate-hydroxyethyl acrylate-Me methacrylate-polypropylene glycol-polypropylene glycol dimethacrylate-TDI; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

IT Coating materials
 (water-resistant; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

IT **185950-36-1P**, 1,4-Butanediol-2-ethylhexyl acrylate-2-hydroxyethyl acrylate-methyl methacrylate-polypropylene glycol dimethacrylate-polytetramethylene glycol-TDI copolymer **185950-37-2P**
185950-38-3P 185950-39-4P 185950-40-7P 185950-41-8P
 RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
 (rubber; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

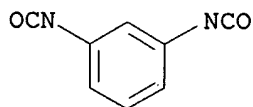
IT **185950-36-1P**, 1,4-Butanediol-2-ethylhexyl acrylate-2-hydroxyethyl acrylate-methyl methacrylate-polypropylene glycol dimethacrylate-polytetramethylene glycol-TDI copolymer **185950-37-2P**
185950-38-3P 185950-39-4P
 RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
 (rubber; cold-resistant acrylic syrup compns. for waterproof coatings or joints)

RN 185950-36-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,4-butanediol, 1,3-diisocyanatomethylbenzene, 2-ethylhexyl 2-propenoate, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS

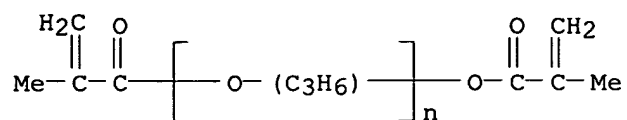


D1-Me

CM 2

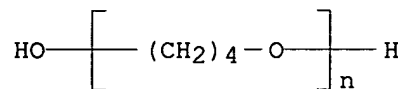
CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



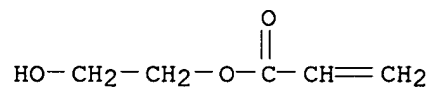
CM 3

CRN 25190-06-1
CMF (C4 H8 O)_n H2 O
CCI PMS



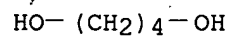
CM 4

CRN 818-61-1
CMF C5 H8 O3



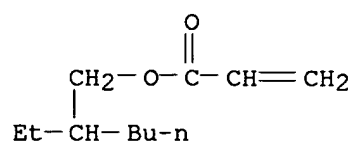
CM 5

CRN 110-63-4
CMF C4 H10 O2



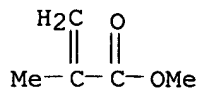
CM 6

CRN 103-11-7
CMF C11 H20 O2



CM 7

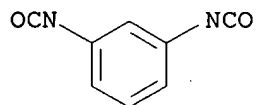
CRN 80-62-6
CMF C5 H8 O2



RN 185950-37-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,4-butanediol, 1,3-diisocyanatomethylbenzene, 2-ethylhexyl 2-propenoate, .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 2-hydroxyethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

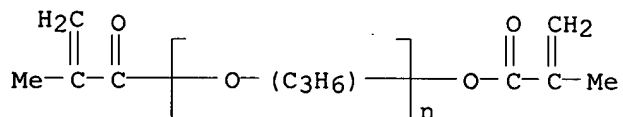
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS



D1-Me

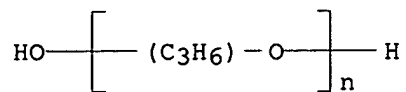
CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



CM 3

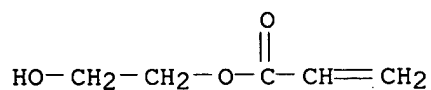
CRN 25322-69-4
CMF (C3 H6 O)_n H2 O
CCI IDS, PMS



CM 4

CRN 818-61-1

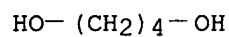
CMF C5 H8 O3



CM 5

CRN 110-63-4

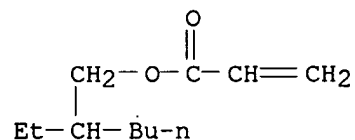
CMF C4 H10 O2



CM 6

CRN 103-11-7

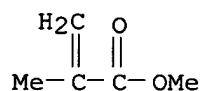
CMF C11 H20 O2



CM 7

CRN 80-62-6

CMF C5 H8 O2



RN 185950-38-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,4-butanediol, 2-ethylhexyl 2-propenoate, .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-

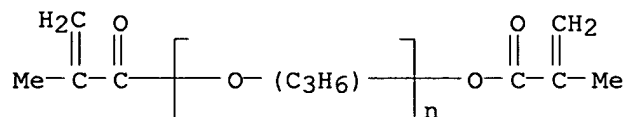
1,2-ethanediyl)], 2-hydroxyethyl 2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

CCI IDS, PMS

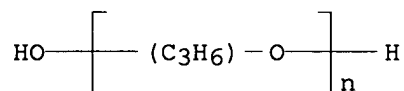


CM 2

CRN 25322-69-4

CMF (C3 H6 O)n H2 O

CCI IDS, PMS



CM 3

CRN 9016-87-9

CMF Unspecified

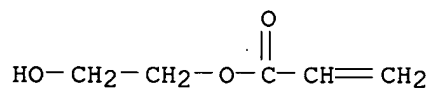
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 818-61-1

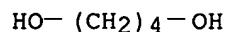
CMF C5 H8 O3



CM 5

CRN 110-63-4

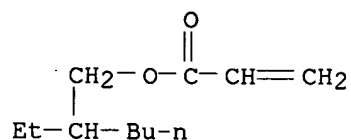
CMF C4 H10 O2



CM 6

CRN 103-11-7

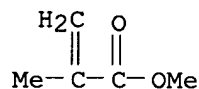
CMF C11 H20 O2



CM 7

CRN 80-62-6

CMF C5 H8 O2



RN 185950-39-4 HCAPLUS

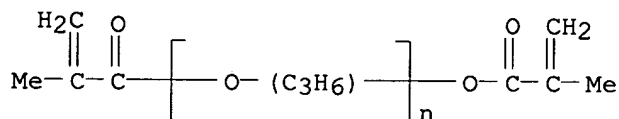
CN Decanedioic acid, bis(2-ethylhexyl) ester, polymer with 1,4-butanediol, 2-ethylhexyl 2-propenoate, .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS

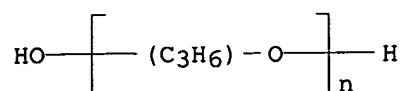


CM 2

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS



CM 3

CRN 9016-87-9

CMF Unspecified

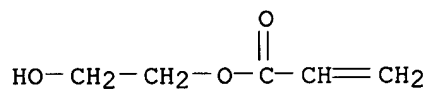
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 818-61-1

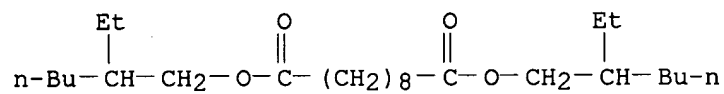
CMF C5 H8 O3



CM 5

CRN 122-62-3

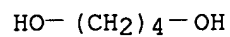
CMF C26 H50 O4



CM 6

CRN 110-63-4

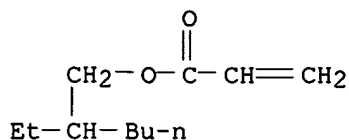
CMF C4 H10 O2



CM 7

CRN 103-11-7

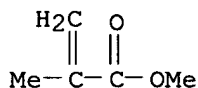
CMF C11 H20 O2



CM 8

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 20 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:721321 HCAPLUS

DN 125:343199

TI Display device using polymer-dispersed liquid crystal film

IN Abe, Tomya; Konishi, Shiro; Okabe, Masahiro

PA Hitachi Cable, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G02F001-1333

ICS C09K019-54; G02F001-137

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 75

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | JP 08220512 | A2 | 19960830 | JP 1995-24110 | 19950213 |
| PRAI | JP 1995-24110 | | 19950213 | | |
| AB | The device includes a liq. crystal film where liq. crystal drops are dispersed in an aq.-sol. polymer matrix via a layer formed from poly(propylene glycol mono- or di(meth)acrylate). The device, including a polyoxypropylene layer between the polymer matrix and liq. crystal drops, is also claimed. The device shows low driving voltage and low hysteresis. | | | | |
| ST | liq crystal display device interface layer; polyoxypropylene liq crystal polymer dispersed display; acrylic polyalkylene liq crystal display device | | | | |
| IT | Optical imaging devices (liq.-crystal, display device using polymer-dispersed liq. crystal film) | | | | |
| IT | 25322-69-4P, Nissan UNIOI D 1000 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses) (Nissan Uniol D; display device using polymer-dispersed liq. crystal film) | | | | |
| IT | 25791-96-2P RL: DEV (Device component use); PNU (Preparation, unclassified); PREP | | | | |

(Preparation); USES (Uses)

(Nissan Uniol TG; display device using polymer-dispersed liq. crystal film)

IT 122463-72-3, Poval 205 163663-29-4, TL 204

RL: DEV (Device component use); USES (Uses)

(display device using polymer-dispersed liq. crystal film)

IT 9019-16-3P, Blemmer PP 500 homopolymer **69067-16-9P**, NK Ester P
9G homopolymer 77136-16-4P, Polypropylene glycol monoacrylate
homopolymer 94457-89-3P, NK Ester APG 400 homopolymerRL: DEV (Device component use); PNU (Preparation, unclassified); **PREP**
(Preparation); USES (Uses)

(display device using polymer-dispersed liq. crystal film)

IT **69067-16-9P**, NK Ester P 9G homopolymerRL: DEV (Device component use); PNU (Preparation, unclassified); **PREP**
(Preparation); USES (Uses)

(display device using polymer-dispersed liq. crystal film)

RN 69067-16-9 HCAPLUS

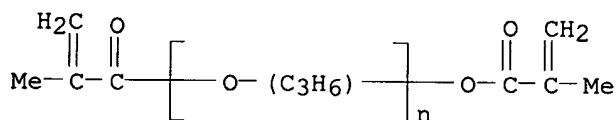
CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-
.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, homopolymer (9CI) (CA INDEX
NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



L53 ANSWER 21 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:38912 HCAPLUS

DN 124:119694

TI Curable polymer compositions and their products

IN Uehara, Toshishige; Tosaka, Minoru; Oota, Tomohisa

PA Hitachi Chemical Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F299-02

ICS C09J007-02

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42, 74

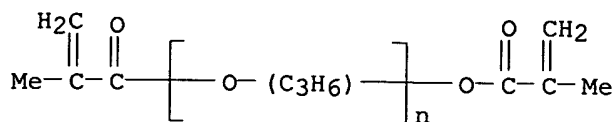
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 07268048 | A2 | 19951017 | JP 1994-64943 | 19940401 |
| PRAI | JP 1994-64943 | | 19940401 | | |

AB The antistatic compns. useful for adhesives and coatings comprise (A) hydrophilic prepolymers (mol. wt. 500-50,000) contg. polyoxyalkylene units and unsatd. double bonds, (B) polyfunctional chain-transfer agents (mol. wt. 100-1000) contg. .gtoreq.2 SH groups, and (C) acrylate polymers (mol.

wt. .gtoreq.50,000) contg. .gtoreq.1 OH, CO₂H, and/or amino groups. Thus, polypropylene glycol dimethacrylate (mol. wt. 13,000) 100, Bu methacrylate-Et acrylate-acrylic acid copolymer 20, and trimethylolpropane tris(.beta.-thiopropionate) 5 parts were mixed, applied on a PVA film, heated, and irradiated by electron beam to obtain a tape. It was placed on a liq.-crystal board showing static elec. resistance >200 V, and peel time in H₂O 1 min with no change of the board surface.

- ST polyoxyalkylene acrylic polymer adhesive tape; liq crystal board
antistatic adhesive
- IT Thiols, miscellaneous
RL: MSC (Miscellaneous)
(chain-transfer agents; curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT Adhesive tapes
Adhesives
Coating materials
Optical imaging devices
(curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT Chain-transfer agents
(thiols; curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT 10193-99-4, Pentaerythritol tetrakis(thioglycolate) 33007-83-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(chain-transfer agent; curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT 57636-10-9P 57998-21-7P, Acrylic acid-butyl methacrylate-ethyl acrylate copolymer **69067-16-9P** 88007-25-4P, Acrylic acid-acrylonitrile-butyl methacrylate copolymer
RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)
(curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- IT **69067-16-9P**
RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM
(Technical or engineered material use); **PREP (Preparation)**; USES
(Uses)
(curable polyoxyalkylene-acrylic polymer compns. for antistatic adhesive tapes for liq.-crystal boards)
- RN 69067-16-9 HCAPLUS
- CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-, homopolymer (9CI) (CA INDEX NAME)
- CM 1
- CRN 25852-49-7
- CMF (C3 H6 O)_n C8 H10 O3
- CCI IDS, PMS



L53 ANSWER 22 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:879405 HCAPLUS

DN 123:301042

TI Nonlinear **optical** material with improved processability

IN Hayashi, Yoshio

PA Asahi Chemical Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G02F001-35

CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 38, 56

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | JP 07218938 | A2 | 19950818 | JP 1994-14570 | 19940208 |
| PRAI | JP 1994-14570 | | 19940208 | | |
| AB | The material consists of metal fine particles with particle size 1-100 nm dispersed in a photoactive org. matrix. A nonlinear optical material was obtained from Ag heptafluorobutyrate, polypropylene glycol dimethacrylate, 2-ethylhexyl methacrylate, 2-butanone, and benzoin Et ether. | | | | |
| ST | nonlinear optical metal particle processability | | | | |
| IT | Polyimides, uses | | | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (nonlinear optical material comprising metal fine particles dispersed in photoactive org. matrix with improved processability) | | | | |
| IT | Optical materials (nonlinear, nonlinear optical material comprising metal fine particles dispersed in photoactive org. matrix with improved processability) | | | | |
| IT | 7440-22-4P, Silver, uses 7440-50-8P, Copper, uses 138048-31-4P RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation) ; USES (Uses) (nonlinear optical material comprising metal fine particles dispersed in photoactive org. matrix with improved processability) | | | | |
| IT | 170006-75-4, Pimel G 6246S RL: TEM (Technical or engineered material use); USES (Uses) (nonlinear optical material comprising metal fine particles dispersed in photoactive org. matrix with improved processability) | | | | |
| IT | 3794-64-7, Silver heptafluorobutyrate 16712-25-7, Copper trifluoroacetate RL: RCT (Reactant); RACT (Reactant or reagent) (redn.; nonlinear optical material comprising metal fine particles dispersed in photoactive org. matrix with improved processability) | | | | |
| IT | 138048-31-4P RL: PNU (Preparation, unclassified); TEM (Technical or engineered material | | | | |

use); **PREP (Preparation); USES (Uses)**
 (nonlinear optical material comprising metal fine particles
 dispersed in photoactive org. matrix with improved processability)

RN 138048-31-4 HCAPLUS

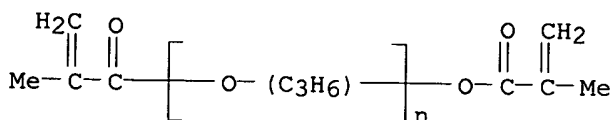
CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
 .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-
 propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

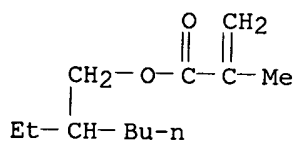
CCI IDS, PMS



CM 2

CRN 688-84-6

CMF C12 H22 O2



L53 ANSWER 23 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:652231 HCAPLUS

DN 123:33885

TI Macromonomers prepared from a monomer such as 3-
 [tris(trimethylsiloxy)silyl]propyl methacrylate and their use in graft
 copolymers

IN McGee, Joseph A.; Valint, Paul L., Jr.

PA Bausch and Lomb Inc., USA

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08F230-08

ICS G02B001-04

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37, 38, 63

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9415980 | A1 | 19940721 | WO 1993-US12624 | 19931228 |
| W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, | | | | |

SE, SK, UA, VN
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
 BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

| | | | | |
|---------------------------|----|----------|-----------------|----------|
| US 5336797 | A | 19940809 | US 1992-998346 | 19921230 |
| CA 2152258 | AA | 19940721 | CA 1993-2152258 | 19931228 |
| AU 9460804 | A1 | 19940815 | AU 1994-60804 | 19931228 |
| AU 672882 | B2 | 19961017 | | |
| EP 675910 | A1 | 19951011 | EP 1994-907113 | 19931228 |
| EP 675910 | B1 | 19970917 | | |
| R: DE, ES, FR, GB, IE, IT | | | | |
| BR 9307806 | A | 19951114 | BR 1993-7806 | 19931228 |
| JP 08507798 | T2 | 19960820 | JP 1993-516075 | 19931228 |
| ES 2108428 | T3 | 19971216 | ES 1994-907113 | 19931228 |
| US 5387663 | A | 19950207 | US 1994-186204 | 19940125 |
| US 5563184 | A | 19961008 | US 1994-333441 | 19941102 |
| PRAI US 1992-998346 | | 19921230 | | |
| WO 1993-US12624 | | 19931228 | | |
| US 1994-186204 | | 19940125 | | |

AB The title macromonomers are prepd. and copolymd. with hydrophilic or hydrophobic monomers to prep. O-permeable graft copolymers for use as biomedical devices such as contact **lenses**. Polymg. H2C:CMCO2(CH2)3Si(OSiMe3)3 with HSCH2CH2OH as a chain transfer agent and reacting the functional group on 1 end of the polymer chain with glycidyl methacrylate gave a methacrylate-terminated macromonomer which was copolymd. with H2C:CHCONMe2 and polyethylene glycol dimethacrylate (mol. wt. 1000) to give a crosslinked graft copolymer. The copolymer was strong and durable and showed high permeability to O.

ST methacrylate tris(trimethylsiloxy)silylpropyl macromonomer graft copolymer; biomedical device siloxane graft copolymer; polymn graft macromonomer methacrylate siloxane; siloxane methacrylate macromonomer graft copolymer; dimethylacrylamide graft copolymer siloxane macromonomer; crosslinking graft copolymer siloxane macromonomer; polyoxyalkylene dimethacrylate siloxane graft copolymer; contact **lens** copolymer siloxane macromonomer; oxygen permeability copolymer contact **lens**

IT Siloxanes and Silicones, preparation
 RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (graft polymers with tris((trimethylsiloxy)silyl)propyl methacrylate and dimethylacrylamide; prepn. and properties of oxygen-permeable tough copolymers for biomedical devices)

IT Crosslinking
 (of oxygen-permeable graft copolymers of tris(trimethylsiloxy)silyl)propyl methacrylate macromonomers and acrylic monomers for medical goods)

IT Medical goods
 (oxygen-permeable graft copolymers of tris(trimethylsiloxy)silyl)propyl methacrylate macromonomers and acrylic monomers for)

IT **Lenses**
 (contact, graft copolymers of tris(trimethylsiloxy)silyl)propyl methacrylate macromonomers and acrylic monomers for oxygen-permeable)

IT Polymerization
 (graft, of acrylic monomers with tris(trimethylsiloxy)silyl)propyl methacrylate macromonomers)

IT 164386-61-2P 164386-62-3P 164386-63-4P 164386-64-5P
 RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (prepn. and properties of oxygen-permeable tough copolymers for

biomedical devices)

IT 164386-62-3P

RL: IMF (Industrial manufacture); NUU (Other use, unclassified);
 PRP (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (prepn. and properties of oxygen-permeable tough copolymers for
 biomedical devices)

RN 164386-62-3 HCAPLUS

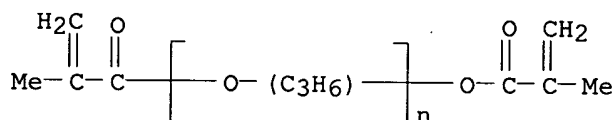
CN 2-Propenoic acid, 2-methyl-, 3-[3,3,3-trimethyl-1,1-
 bis[(trimethylsilyl)oxy]disiloxanyl]propyl ester, polymer with
 N,N-dimethyl-2-propenamide and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-
 [(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], graft
 (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

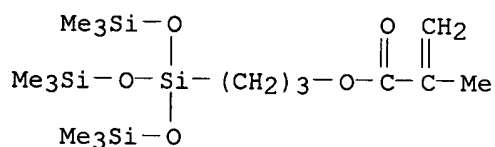
CCI IDS, PMS



CM 2

CRN 17096-07-0

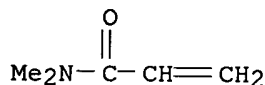
CMF C16 H38 O5 Si4



CM 3

CRN 2680-03-7

CMF C5 H9 N O



L53 ANSWER 24 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:513635 HCAPLUS

DN 122:278062

TI Electrophotographic liquid developers with good dispersibility for durable

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

offset printing masters
 IN Kato, Eiichi
 PA Fuji Photo Film Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03G009-13
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 06337549 | A2 | 19941206 | JP 1993-149781 | 19930531 |
| PRAI | JP 1993-149781 | | 19930531 | | |

AB The title developers contain resin particles dispersed in a nonaq. solvent having elec. resistance .gtoreq.109 .OMEGA.-cm and dielec. const. .ltoreq.0.5, wherein the the resin particles are formed by polymg. (A) monofunctional monomers sol. in the nonaq. solvent but forming polymers insol. in the solvent, (B) oligomers (Mn .ltoreq.1 .times. 104) contg. repeating units of CH(a1)C(a2)(VOD0) (I) and having carboxy, sulfo, hydroxy, formyl, amino, phosphono, P(O)(OH)G1 endgroup(s) (G1 = hydrocarbyl, hydrocarbyloxy) only at one end, (C) polyfunctional comonomers, and (D) star block copolymer-type dispersion stabilizers (Mw 2 .times. 104 to 1 .times. 106) comprising block A from components having polar group(s) chosen from phosphono, carboxy, sulfo, OH, formyl, amino, P(O)(OH)R1 (R1 = hydrocarbyl, hydrocarbyloxy), CONR3R4, SO2NR3R4 (R3, R4 = H, hydrocarbyl), and cyclic acid anhydride group and/or the above A-type monomers and block B of CH(b1)C(b2)(X1Y1) (II) repeating unit. In I and II, V0 = CO2, O2C, (CH2)xCO2, (CH2)xO2C, O, SO2, CONHCO2, CONHCONH, COND11, SO2ND11, phenylene; D11 = H, C1-22 hydrocarbyl; x = 1-4; a1, a2 = H, halogen, cyano, hydrocarbyl, CO2D12, CO2D12; D12 = H, (un)substituted hydrocarbyl; D0 = C1-22 hydrocarbyl, -(A1B1)m(A2B2)nD21; D21 = H, C1-22 hydrocarbyl; B1, B2 = O, CO, CO2, O2C, SO2, ND22, COND22, ND22CO; D22 as defined for D11; A1, A2 = C1-18 hydrocarbyl **optionally** contg. substituents or linking group CHB3(A4B4)pD23; B3 and B4 as defined for B1 and B2; A4 = (un)substituted C1-18 hydrocarbyl; D23 as defined for D21; m, n, p = 0-4, excluding m = n = p = 0; X1 = CO2, O2C, (CH2)1-3CO2, (CH2)1-3O2C, O; Y1 = C.gtareq.8 hydrocarbyl; b1, b2 = H, halogen, cyano, hydrocarbyl, CO2Z1; Z1 = H, (un)substituted hydrocarbyl.

ST electrophotog liq developer polymer binder; star block copolymer dispersion stabilizer

IT Lithographic plates
 (masters; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT Electrophotographic developers
 (liq., electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT Polymerization catalysts
 (star-block, electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT 2638-94-ODP, 4,4'-Azobis(4-cyanovaleric acid), acrylic oligomers terminated by 4693-47-4DP, acrylic oligomers terminated by 19706-80-ODP, acrylic oligomers terminated by 61551-69-7DP, acrylic oligomers terminated by 67076-30-6P, Methyl methacrylate-thioglycolic acid telomer 79964-36-6P 104222-30-2DP, acrylic oligomers terminated by 104380-04-3DP, acrylic oligomers terminated by 118585-12-9DP, acrylic oligomers terminated by 118585-14-1DP, acrylic oligomers

terminated by 127939-27-9P 131985-73-4DP, acrylic oligomers terminated by 131985-74-5DP, acrylic oligomers terminated by 132612-34-1P
 138114-86-0DP, carboxy-terminated oligomers 140693-69-2P 140693-79-4P
 140708-08-3P 140708-09-4P 140708-10-7P 140863-46-3P 140863-47-4P
 140863-48-5P 140863-50-9P 140863-51-0P 140863-52-1P 140863-54-3P
 140863-56-5P 140863-57-6P 140863-60-1P 140863-68-9P 140863-71-4P
 140863-72-5P 140863-75-8P 140863-78-1P 140863-81-6P 140888-43-3P
 141431-76-7P 141472-43-7P 141472-47-1P 141492-10-6P 162578-05-4P
 162578-25-8DP, functional group-terminated oligomers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT 159406-95-8P 159406-96-9P 162579-55-7P 162579-56-8P 162579-57-9P
 162579-58-0P **162579-59-1P 162579-60-4P** 162579-61-5P
 162579-62-6P 162579-63-7P 162579-64-8P 162579-65-9P 162579-66-0P
 162579-67-1P 162579-68-2P 162579-69-3P 162579-70-6P 162579-71-7P
 162579-72-8P 162579-73-9P 162579-74-0P 162579-75-1P 162579-76-2P
 162579-77-3P 162679-98-3P 162679-99-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(latex particles; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 152792-55-7
 154340-06-4 155293-25-7 159967-38-1 159967-39-2 159967-40-5
 159967-41-6 159967-42-7 159967-43-8 159967-44-9

RL: CAT (Catalyst use); USES (Uses)

(star block polymn. initiators; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT 159967-36-9P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(star, dispersants; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT 150469-59-3P 159967-35-8P 159967-46-1P 159967-47-2P 159967-48-3P
 159967-49-4P 159967-50-7P 159967-51-8P 159967-52-9P 159967-55-2P
 159967-56-3P 162578-02-1P 162578-07-6P 162578-09-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(star, dispersion stabilizers; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

IT **162579-59-1P 162579-60-4P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(latex particles; electrophotog. liq. developers with good dispersibility for durable offset printing masters)

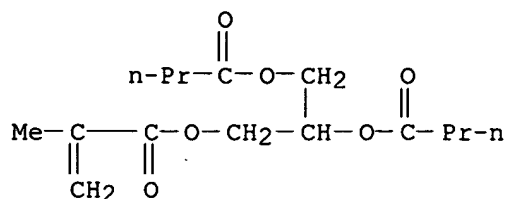
RN 162579-59-1 HCAPLUS

CN Butanoic acid, 1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,2-ethanediyl ester, polymer with 1-methyl-1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate and methyl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 138114-62-2

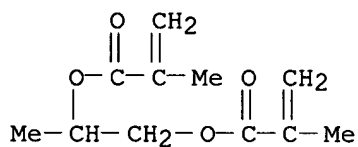
CMF C15 H24 O6



CM 2

CRN 7559-82-2

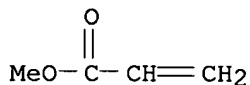
CMF C11 H16 O4



CM 3

CRN 96-33-3

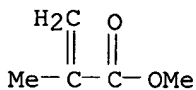
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



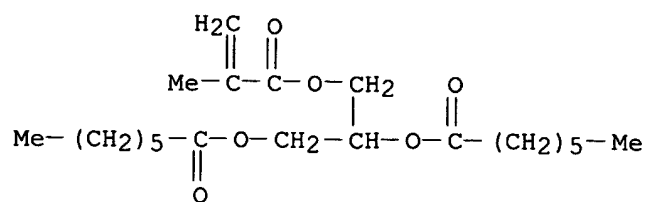
RN 162579-60-4 HCAPLUS

CN Heptanoic acid, 1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,2-ethanediyl ester, polymer with 1-methyl-1,2-ethanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate and methyl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

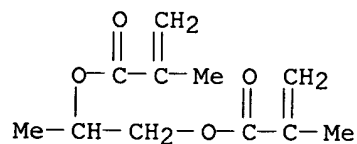
CRN 124322-34-5

CMF C21 H36 O6



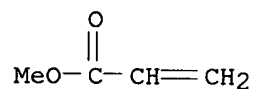
CM 2

CRN 7559-82-2
CMF C11 H16 O4



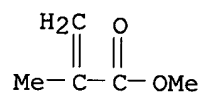
CM 3

CRN 96-33-3
CMF C4 H6 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L53 ANSWER 25 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1994:491921 HCAPLUS
DN 121:91921
TI soft contact lenses
IN Honda, Tomoji; Kaetsu, Isao
PA Tokyo Keikaku Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
 IC ICM G02C007-04
 ICS C08F220-18; C08F220-28; C08F226-10
 ICA C08F299-02
 CC 63-7 (Pharmaceuticals)
 Section cross-reference(s): 38

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 06123861 | A2 | 19940506 | JP 1992-296600 | 19921009 |
| PRAI | JP 1992-296600 | | 19921009 | | |

AB Soft contact **lenses** are prepd. with a mixt. contg. diacrylic(methacrylic) esters, vinylpyrrolidone, 2-hydroxyethyl methacrylate, and copolymerizable monomers, and contain >50% water. The contact **lenses** showed high bending strength and are comfortable to wear. Thus, dimethacrylic esters 15, N-vinylpyrrolidone 60, Me methacrylate 20, and 2-hydroxyethyl methacrylate 5 wt. parts were reacted and made into soft contact **lenses**.

ST soft contact **lens** acrylate copolymer

IT **Lenses**
 (contact, soft, manuf. of, acrylate copolymers for)

IT 131280-12-1P 156546-45-1P **156546-47-3P**
 RL: **PREP (Preparation)**
 (prepn. of, for soft contact **lens** manufg.)

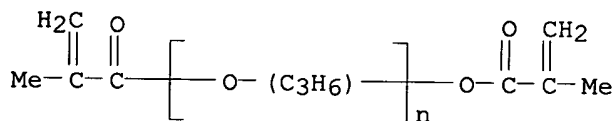
IT **156546-47-3P**
 RL: **PREP (Preparation)**
 (prepn. of, for soft contact **lens** manufg.)

RN 156546-47-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

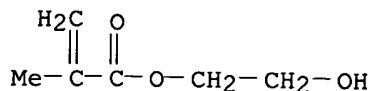
CM 1

CRN 25852-49-7
 CMF (C3 H6 O)n C8 H10 O3
 CCI IDS, PMS



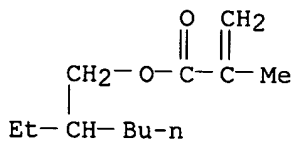
CM 2

CRN 868-77-9
 CMF C6 H10 O3



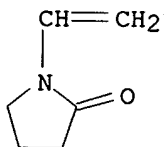
CM 3

CRN 688-84-6
CMF C12 H22 O2



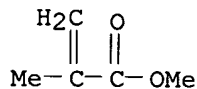
CM 4

CRN 88-12-0
CMF C6 H9 N O



CM 5

CRN 80-62-6
CMF C5 H8 O2



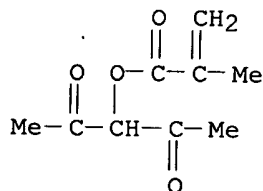
L53 ANSWER 26 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1994:285068 HCAPLUS
DN 120:285068
TI Manufacture of electrophotographic lithographic printing plate
IN Kato, Eiichi; Oda, Akihisa; Tashiro, Hiroshi
PA Fuji Photo Film Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03G013-28
ICS B41N003-08; G03G005-08; G03G005-087
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 35
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|---------------------|--------------|-----------------|--------------|
| PI | JP 05107820 | A2 | 19930430 | JP 1991-266398 | 19911015 |
| | US 5250376 | A | 19931005 | US 1992-943520 | 19920911 |
| PRAI | JP 1991-234526 | | 19910913 | | |
| | JP 1991-266398 | | 19911015 | | |
| | JP 1991-297244 | | 19911113 | | |
| AB | For an electrophotog. lithog. printing plate made up of an electrophotog. photoreceptor having .gtoreq.1 photoconductor layer contg. a photoconductive inorg. compd. and a binder resin on a conductive support, the title manuf. comprises effecting imagewise exposure to form a toner image on the photoreceptor which contains .gtoreq.1 kind of a binder resin (P), .gtoreq.1 binder resin (B), and optionally a crosslinking agent and then desensitizing a non-image region of the photoconductor layer with a soln. contg. a hydrophilic compd. which has a substituent with a Pearson's nucleophilic const. .gtoreq.5.5:. The resin (P) is made of .gtoreq.1 polymer component contg. a functional group COOCHXX' [X and/or X' = electron-accepting moiety; if a sum of Hammet .sigma.p of X and X' is .gtoreq.0.45, X and X' can be the same]; and. The resin (B) is a heat- and/or photo-hardenable resin. | | | | |
| ST | electrophotog lithog printing plate manuf | | | | |
| IT | Lithographic plates | | | | |
| | (electrophotog., binder resins for, manuf. of) | | | | |
| IT | Electrophotographic photoconductors and photoreceptors | | | | |
| | (for lithog., binder for) | | | | |
| IT | 30604-93-4P | 33518-66-0P | 154628-06-5P | 154628-07-6P | 154628-08-7P |
| | 154628-10-1DP, carboxy-terminated | | 154628-10-1P | 154628-11-2P | |
| | 154628-12-3P | 154628-13-4P | 154628-14-5P | 154628-15-6P | |
| | 154628-16-7P | 154628-17-8P | 154628-19-0P | 154628-20-3P | 154628-21-4P |
| | 154628-22-5P | 154628-23-6P | 154628-24-7P | 154628-25-8P | 154628-27-0P |
| | 154628-29-2P | 154628-31-6P | 154628-33-8P | 154628-35-0P | 154649-15-7P |
| | 154718-87-3P | 154718-88-4P | 154718-89-5P | 154718-90-8P | 154718-91-9P |
| | 154718-92-0P | 154718-94-2P | 154718-95-3P | 154718-97-5P | |
| | RL: PREP (Preparation) | | | | |
| | (prepn. of, electrophotog. lithog. printing plate from, manuf. of) | | | | |
| IT | 154628-13-4P | | | | |
| | RL: PREP (Preparation) | | | | |
| | (prepn. of, electrophotog. lithog. printing plate from, manuf. of) | | | | |
| RN | 154628-13-4 HCAPLUS | | | | |
| CN | 2-Propenoic acid, 2-methyl-, 1-acetyl-2-oxopropyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 1-methyl-1,2-ethanediyl di-2-propenoate (9CI) (CA INDEX NAME) | | | | |

CM 1

CRN 129955-71-1

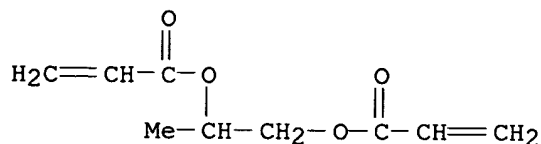
CMF C9 H12 O4



CM 2

CRN 25151-33-1

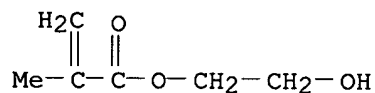
CMF C9 H12 O4



CM 3

CRN 868-77-9

CMF C6 H10 O3



L53 ANSWER 27 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1993:525260 HCAPLUS
 DN 119:125260
 TI Contact **lens** and method of manufacturing the same
 IN Kiguchi, Hiroshi; Aoyama, Taku
 PA Seiko Epson Corp., Japan
 SO PCT Int. Appl., 95 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 IC ICM C08J007-16
 ICS G02C007-04; C08F267-06
 CC 63-7 (Pharmaceuticals)
 Section cross-reference(s): 37
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | WO 9312162 | A1 | 19930624 | WO 1992-JP1203 | 19920921 |
| | W: DE, JP, KR, US | | | | |
| | DE 4294375 | T | 19940113 | DE 1992-4294375 | 19920921 |
| | JP 3254679 | B2 | 20020212 | JP 1993-508800 | 19920921 |
| | US 5391589 | A | 19950221 | US 1992-992911 | 19921218 |
| PRAI | JP 1991-325998 | A | 19911210 | | |
| | JP 1992-68335 | A | 19920326 | | |
| | JP 1992-1043 | A | 19920107 | | |
| | JP 1992-95525 | A | 19920415 | | |
| | JP 1992-95527 | A | 19920415 | | |
| | WO 1992-JP1203 | W | 19920921 | | |

AB Hard contact **lenses** which are readily wettable, having high O permeability, and are comfortable to wear, are prepd. by grafting a hydrophilic monomer on the surface of **lens** material prepd. from

copolymers consisting of (un)substituted (meth)acrylic acid esters, or copolymers of fumaric acid esters.

ST contact lens acrylic graft copolymer

IT Lenses

(contact, manuf. of, from graft copolymers of methacrylates and fumarates)

IT 149762-61-8P 149762-62-9P

RL: THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(prepn. of, for contact lenses)

IT 149762-61-8P 149762-62-9P

RL: THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(prepn. of, for contact lenses)

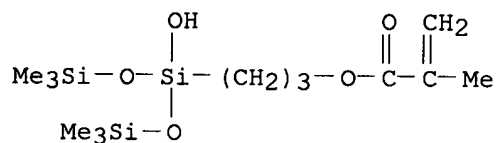
RN 149762-61-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), 1,1,1,7,7,7-hexamethyl-3,5-bis[(trimethylsilyl)oxy]tetrasiloxane, 3-[1-hydroxy-3,3,3-trimethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], methyl 2-methyl-2-propenoate, 1,3-propanediyl bis(2-methyl-2-propenoate), 2-propenamide, 2,2,2-trifluoroethyl 2-methyl-2-propenoate and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 83692-44-8

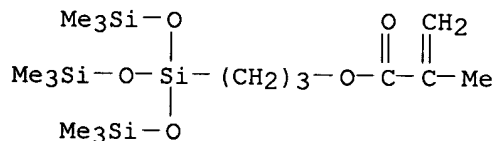
CMF C13 H30 O5 Si3



CM 2

CRN 17096-07-0

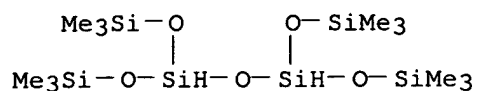
CMF C16 H38 O5 Si4



CM 3

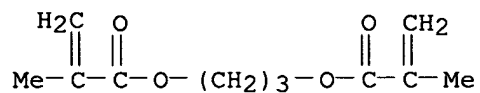
CRN 10516-81-1

CMF C12 H38 O5 Si6



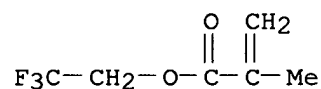
CM 4

CRN 1188-09-6
CMF C11 H16 O4



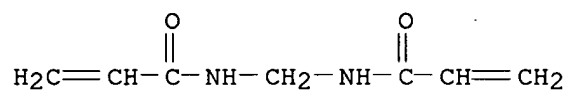
CM 5

CRN 352-87-4
CMF C6 H7 F3 O2



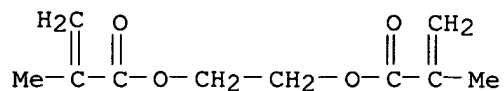
CM 6

CRN 110-26-9
CMF C7 H10 N2 O2



CM 7

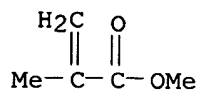
CRN 97-90-5
CMF C10 H14 O4



CM 8

CRN 80-62-6

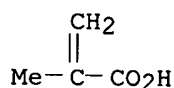
CMF C5 H8 O2



CM 9

CRN 79-41-4

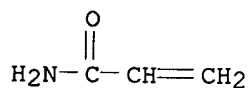
CMF C4 H6 O2



CM 10

CRN 79-06-1

CMF C3 H5 N O



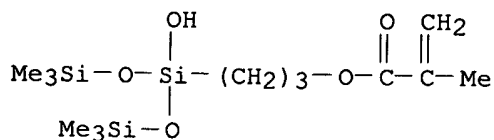
RN 149762-62-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), 2,2,3,3,4,4,4-heptafluorobutyl 2-methyl-2-propenoate, 1,1,1,7,7,7-hexamethyl-3,5-bis[(trimethylsilyl)oxy]tetrasiloxane, 3-[1-hydroxy-3,3,3-trimethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], 1,3-propanediyl bis(2-methyl-2-propenoate), 2-propenamide and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

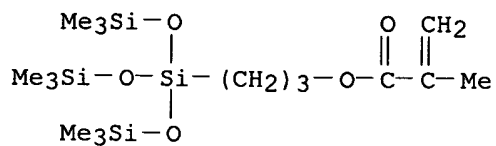
CRN 83692-44-8

CMF C13 H30 O5 Si3



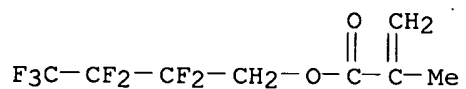
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CRN 17096-07-0
CMF C16 H38 O5 Si4



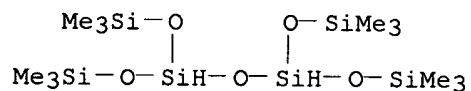
CM 3

CRN 13695-31-3
CMF C8 H7 F7 O2



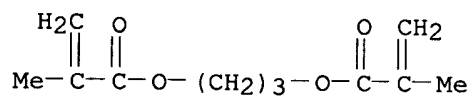
CM 4

CRN 10516-81-1
CMF C12 H38 O5 Si6



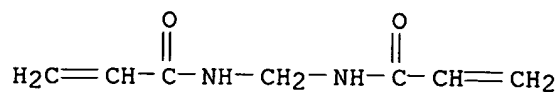
CM 5

CRN 1188-09-6
CMF C11 H16 O4



CM 6

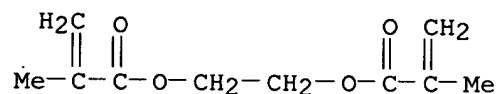
CRN 110-26-9
CMF C7 H10 N2 O2



CM 7

CRN 97-90-5

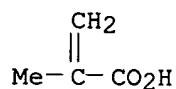
CMF C10 H14 O4



CM 8

CRN 79-41-4

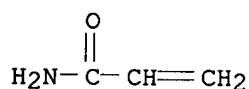
CMF C4 H6 O2



CM 9

CRN 79-06-1

CMF C3 H5 N O



L53 ANSWER 28 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1993:519274 HCAPLUS

DN 119:119274

TI Transparent acrylic rubber compositions

IN Tokumitsu, Hideyuki; Seki, Kazuhiko

PA Nok Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L033-10

ICS C08F299-02; C08K005-10

CC 39-9 (Synthetic Elastomers and Natural Rubber)

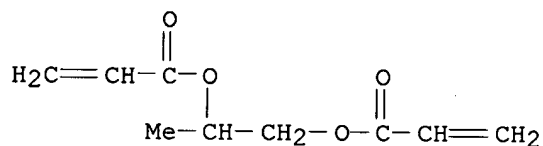
FAN.CNT 1

PATENT NO.

KIND DATE

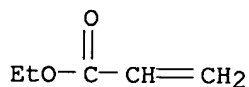
APPLICATION NO. DATE

PI JP 05039399 A2 19930219 JP 1991-216307 19910802
 PRAI JP 1991-216307 19910802
 AB The title compns. with good mech. properties, useful for optical fiber core materials and films, contain (A) copolymers comprising alkyl (meth)acrylates and CH₂:CR₁CO₂R₂ or CH₂:CR₁CO₂(CH₂)_nOR₂ (R₁ = H, Me; R₂ = dicyclopentenyl; n = 1, 2), and (B) CH₂:CR₁CO(OCH₂CH₂CHR₂)_mOCOCR₁:CH₂ (R₁, R₂ = H, Me; m = 1-3). Thus, Et acrylate 900, dicyclopentenyl acrylate 100, AIBN 2.0, mercaptoethanol 1.5, and MEK 1000 g were heated at 55.degree. to 35% conversion to obtain 330 g 10:90 dicyclopentenyl acrylate-Et acrylate copolymer, which was heated at 120.degree. for 40 min with 66 g 1,3-butylene glycol diacrylate and 1.65 g Perhexa 3M to give a crosslinked rubber sheet showing Haze 3% and transmittance 98% (JIS K7105), and tensile strength 70 kg/cm².
 ST acrylic rubber compn crosslinked transparency; tensile strength acrylic rubber compn
 IT Transparent materials
 (crosslinked acrylic rubber, with good tensile strength)
 IT Rubber, synthetic
 RL: USES (Uses)
 (acrylic, crosslinked, transparent, with good tensile strength)
 IT 149573-14-8 149655-73-2 **149655-74-3 149655-75-4**
 RL: USES (Uses)
 (rubber, crosslinked, **transparent**, with good tensile strength)
 IT **149655-74-3 149655-75-4**
 RL: USES (Uses)
 (rubber, crosslinked, **transparent**, with good tensile strength)
 RN 149655-74-3 HCAPLUS
 CN 2-Propenoic acid, 1-methyl-1,2-ethanediyl ester, polymer with ethyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 25151-33-1
 CMF C9 H12 O4



CM 2

CRN 140-88-5
 CMF C5 H8 O2

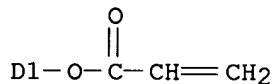
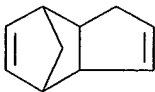


CM 3

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 4

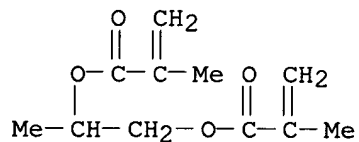
CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



RN 149655-75-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, polymer with ethyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

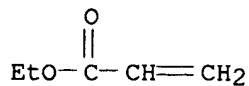
CM 1

CRN 7559-82-2
CMF C11 H16 O4



CM 2

CRN 140-88-5
CMF C5 H8 O2

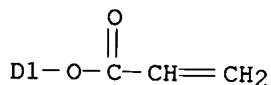
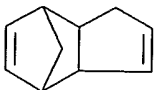


CM 3

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 4

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L53 ANSWER 29 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1993:450983 HCAPLUS
DN 119:50983
TI Photocurable acrylate polymer compositions
IN Nishizawa, Akira
PA Victor Co. of Japan, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L033-06
ICS G11B007-24
ICI C08L033-06, C08L101-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 04366155 | A2 | 19921218 | JP 1991-168802 | 19910613 |
| PRAI | JP 1991-168802 | | 19910613 | | |

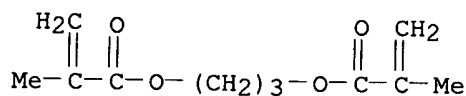
AB Title compns. contg. R2(O2CCR1:CH2)2 (I; R1 = H, Me; R2 = C2-10 alkylene, side chain-contg. bivalent hydrocarbon, bivalent hydrocarbon having side chain via ester bond) and 5-15% thermoplastic resins with soly. to I are molded to give **optical** disk substrates. Thus, 0.6 mol 1,3-propanediol and 1.3 mol methacrylic acid were treated in the presence of p-MeC6H4SO3H and hydroquinone to give 1,3-propandiol dimethacrylate, 50 g of which was blended with 5% Acrypet VH and 2-hydroxy-2-methyl-1-phenylpropan-1-one and molded to give a test piece showing Young's modulus 180 kg/mm² and good heat resistance.

ST propanediol methacrylate polymer photocurable; PMMA blend acrylate polymer photocurable; **optical** disk acrylate polymer blend

IT Heat-resistant materials
(acrylate polymer-thermoplastic resin blends as, photocurable)

IT Plastics

- RL: USES (Uses)
(acrylate polymer-thermoplastic resin blends, photocurable, with good heat resistance, for **optical** disks)
- IT Recording apparatus
(**optical** disks, acrylate polymer-thermoplastic resin blends for, photocurable, with good heat resistance)
- IT 9002-86-2, PVC
RL: USES (Uses)
(acrylate polymer blends, GK Resine, photocurable, with good heat resistance, for **optical** disks)
- IT 9011-14-7, Acrypet VH
RL: USES (Uses)
(acrylate polymer blends, photocurable, with good heat resistance, for **optical** disks)
- IT 25038-54-4, Stylon, properties
RL: PRP (Properties)
(acrylate polymer blends, photocurable, with good heat resistance, for **optical** disks)
- IT 1188-09-6P, 1,3-Propanediol dimethacrylate 13048-34-5P,
1,10-Decanediol diacrylate
RL: PREP (Preparation)
(prepn. of, for photocurable polymers)
- IT 25101-21-7P 31303-75-0P 32011-25-9P
RL: PREP (Preparation)
(prepn. of, thermoplastic resin blends, photocurable, with good heat resistance, for **optical** disks)
- IT 112-47-0, 1,10-Decanediol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acrylic acid)
- IT 79-10-7, Acrylic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with decanediol)
- IT 504-63-2, 1,3-Propanediol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methacrylic acid)
- IT 79-41-4, Methacrylic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with propanediol)
- IT 1188-09-6P, 1,3-Propanediol dimethacrylate
RL: PREP (Preparation)
(prepn. of, for photocurable polymers)
- RN 1188-09-6 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1,3-propanediyl ester (9CI) (CA INDEX NAME)

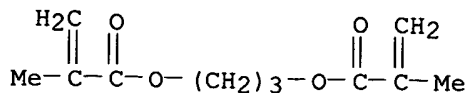


- IT 32011-25-9P
RL: PREP (Preparation)
(prepn. of, thermoplastic resin blends, photocurable, with good heat resistance, for **optical** disks)
- RN 32011-25-9 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1,3-propanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1188-09-6

CMF C11 H16 O4



L53 ANSWER 30 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1993:104636 HCAPLUS

DN 118:104636

TI Transparent acrylic rubber compositions useful for optical fibers

IN Amano, Satoshi; Kamishiro, Kazuhiro; Seki, Kazuhiko

PA NOK Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F265-06

ICS C08F299-00; G02B006-00

CC 39-15 (Synthetic Elastomers and Natural Rubber)

Section cross-reference(s): 73

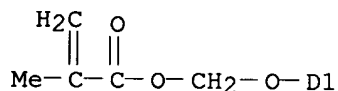
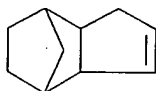
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|-------------|-------------|-----------------|-------------|
| PI | JP 04270709 | A2 | 19920928 | JP 1991-39153 | 19910208 |
| | JP 3156260 | B2 | 20010416 | | |
| PRAI | JP 1991-13690 | A1 | 19910111 | | |
| AB | The title compns., having good flexibility after crosslinking and useful for cores of optical fibers, contain compds. $\text{H}_2\text{C}:\text{CMeCO}(\text{OCH}_2\text{CHR})_m\text{O}_2\text{CCMe}:\text{CH}_2$ ($\text{R} = \text{H}, \text{Me}; m = 1-10$) and copolymers of alkyl (meth)acrylates and $\text{H}_2\text{C}:\text{CR}_1\text{CO}_2\text{ZnR}_2$ ($\text{R}_1 = \text{H}, \text{Me}; \text{Z} = \text{CH}_2\text{O}, \text{CH}_2\text{CH}_2\text{O}; n = 0-2; \text{R}_2 = \text{dicyclopentenyl}$). A mixt. of 10:90 (mol) dicyclopentenyl acrylate-Et acrylate copolymer 330, tetraethylene glycol dimethacrylate 33, and Perhexa 3M 1.65 g was cured in a Teflon tube to give an optical fiber showing light permeability at 700 nm 50%/m. | | | | |
| ST | optical fiber acrylic rubber; dicyclopentenyl acrylate rubber transparency; crosslinking acrylic rubber transparency | | | | |
| IT | Transparent materials | | | | |
| | (acrylic rubbers, crosslinked, for optical fiber cores) | | | | |
| IT | Optical fibers | | | | |
| | (cores for, flexible, crosslinked acrylic rubbers as) | | | | |
| IT | Rubber, synthetic | | | | |
| | RL: USES (Uses) | | | | |
| | (acrylic, transparent, for optical fiber cores) | | | | |
| IT | 9002-84-0, Teflon | | | | |
| | RL: USES (Uses) | | | | |
| | (optical fiber sheaths, for crosslinked acrylic rubber cores) | | | | |
| IT | 146226-60-0 | 146226-63-3 | 146226-64-4 | 146226-65-5 | |
| | 146226-66-6 | 146226-67-7 | 146226-68-8 | | |
| | 146246-42-6 | 146277-79-4 | 146277-80-7 | 146277-81-8 | 146277-82-9 |
| | 146277-83-0 | 146277-84-1 | 146277-85-2 | 146277-86-3 | |
| | 146277-87-4 | | | | |
| | RL: USES (Uses) | | | | |

(rubber, transparent, for optical fiber core)
 IT 146226-65-5 146226-66-6 146226-67-7
 146226-68-8 146277-86-3 146277-87-4
 RL: USES (Uses)
 (rubber, transparent, for optical fiber core)
 RN 146226-65-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with
 [[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy)methyl
 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
 methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
 INDEX NAME)

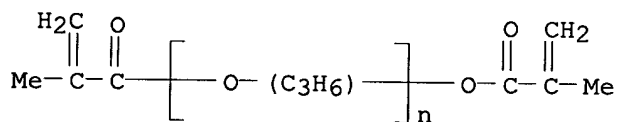
CM 1

CRN 146226-62-2
 CMF C15 H20 O3
 CCI IDS



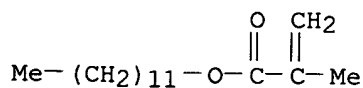
CM 2

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 3

CRN 142-90-5
 CMF C16 H30 O2



RN 146226-66-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with

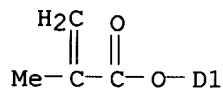
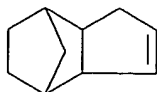
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl
2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
INDEX NAME)

CM 1

CRN 31621-69-9

CMF C14 H18 O2

CCI IDS

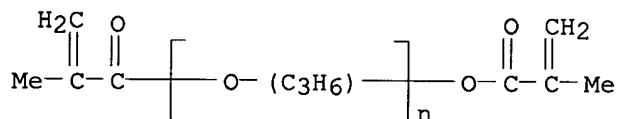


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

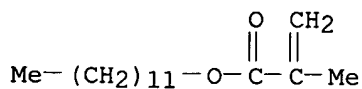
CCI IDS, PMS



CM 3

CRN 142-90-5

CMF C16 H30 O2

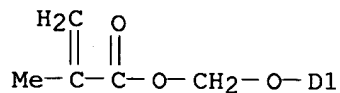
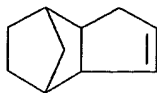


RN 146226-67-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
[[3a,4,5,6,7,7-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]methyl
2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
INDEX NAME)

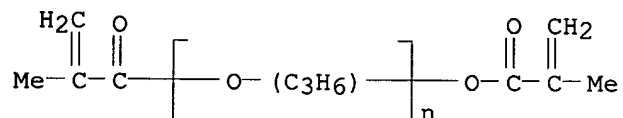
CM 1

CRN 146226-62-2
CMF C15 H20 O3
CCI IDS



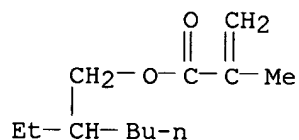
CM 2

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



CM 3

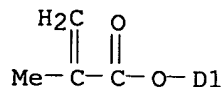
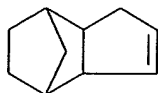
CRN 688-84-6
CMF C12 H22 O2



RN 146226-68-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl
2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
INDEX NAME)

CM 1

CRN 31621-69-9
CMF C14 H18 O2
CCI IDS

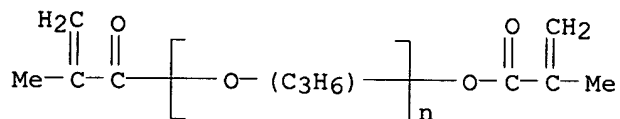


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

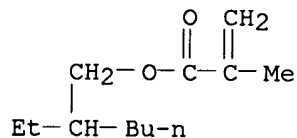
CCI IDS, PMS



CM 3

CRN 688-84-6

CMF C12 H22 O2



RN 146277-86-3 HCAPLUS

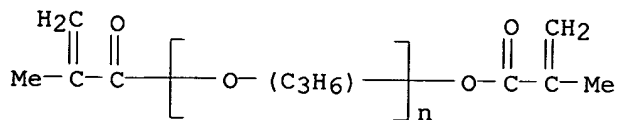
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with
2-[(3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl)oxy]ethyl
2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
INDEX NAME)

CM 1

CRN 25852-49-7

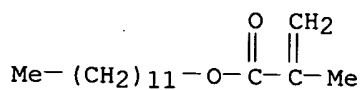
CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



CM 2

CRN 142-90-5
CMF C16 H30 O2

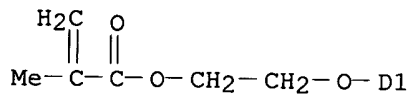
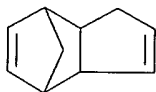


CM 3

CRN 68586-19-6
CMF C16 H22 O3
CCI IDS

CM 4

CRN 68586-18-5
CMF C16 H20 O3
CCI IDS

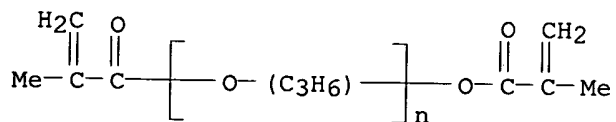


RN 146277-87-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
2-[(3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl)oxy]ethyl
2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-
methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA
INDEX NAME)

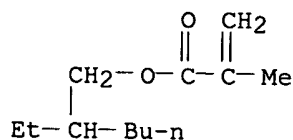
CM 1

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



CM 2

CRN 688-84-6
CMF C12 H22 O2

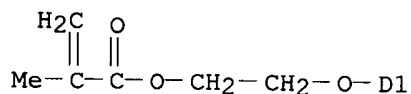
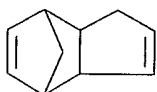


CM 3

CRN 68586-19-6
CMF C16 H22 O3
CCI IDS

CM 4

CRN 68586-18-5
CMF C16 H20 O3
CCI IDS



L53 ANSWER 31 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1993:83015 HCAPLUS
DN 118:83015
TI Silicone compositions curable at room temperature by moisture and cured products
IN Inoue, Yoshio
PA Shin-Etsu Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08G077-26
ICS C08L079-02; C09K003-10; E04B001-682
CC 42-11 (Coatings, Inks, and Related Products)
Section cross-reference(s): 39
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

PI JP 04170432 A2 19920618 JP 1990-298045 19901102
 JP 2529022 B2 19960828
 PRAI JP 1990-298045 19901102

AB The title compns. useful as building sealants contain (A) polymers having OH or hydrolyzable groups on both ends and comprising main chain -NH[CH₂CHR₂CO₂(R₁)nCOCHR₂CH₂NHZNH]mCH₂CHR₂CO(R₁)nO₂CCHR₂CH₂NH- [R₁ = C₂-4 hydrocarbylene; R₂ = H, Me; Z = C₁-20 (un)substituted hydrocarbylene, C₁-20 divalent group contg. ether, ester or NH group, -R₅R₄R₃SiO(R₃R₄SiO)lSiR₃R₄R₅-; R₃, R₄ = C₁-6 (un)substituted hydrocarbyl; R₅ = C₁-6 hydrocarbylene optionally contg. NH group; l = 0-50; m = 1-5; n = 20-200] and end groups XaYbSiR₇R₆3-(a+b) [R₆ = (un)substituted hydrocarbyl; R₇ = C₁-15 divalent group optionally contg. NH group; X = OH; Y = hydrolyzable group; a, b = 0-3; (a + b) = 1-3], (B) 1-20 parts organosilane R₈4-cSiQc [R₈ = C₁-8 (un)substituted hydrocarbyl; Q = hydrolyzable group; c = 3, 4] or hydrolyzate, and (C) 0-5 parts curing catalyst. A sealant comprised (MeO)₃SiC₃H₆NHCH₂CHMeCO₂(CH₂CHMeO)₈OCOCHMeC₂H₂NHCH₂CH₂NHCH₂CHMeCO₂(CH₂CHMeO)₈OCOCHMeCH₂NHC₃H₆Si(OMe)₃ 80, DOP 20, and CaCO₃ 100, MeSi(OMe)₃ 5, dibutyltin dilaurate 2, .gamma.-guanidylpropyltrimethoxysilane 1, and aminopropyltrimethoxysilane 1 part.

ST silicone rubber sealant moisture curable

IT Sealing compositions
 (polyoxypropylene-silicone rubber, moisture-curable at room temp.)

IT Siloxanes and Silicones, preparation
 RL: PREP (Preparation)
 (di-Me, [(trimethoxysilylalkyl)amino]hydrocarbyl group-terminated, manuf. of, for sealants curable at room temp. by moisture)

IT Siloxanes and Silicones, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (di-Me, aminopropyl group-terminated, in polyoxypropylene-silicone rubber sealant manuf.)

IT Rubber, silicone, preparation
 RL: PREP (Preparation)
 (poly(oxypropylene)-, manuf. of, for sealants curable at room temp. by moisture)

IT 107-15-3, 1,2-Ethanediamine, uses 111-40-0, Diethylenetriamine
 1185-55-3 2068-72-6 3663-44-3 13822-56-5, 3-
 Aminopropyltrimethoxysilane 25852-49-7 128310-21-4
 RL: USES (Uses)
 (in polyoxypropylene-silicone rubber sealant manuf.)

IT 145898-59-5P 145898-60-8P 145898-61-9DP, reaction products with di-Me siloxanes 145927-12-4P 145927-13-5P
 RL: PREP (Preparation)
 (manuf. of, for sealants curable at room temp. by moisture)

IT 145849-58-7DP, trimethoxysilylpropylamine-terminated
 RL: PREP (Preparation)
 (oligomeric, manuf. of, for sealants curable at room temp. by moisture)

IT 145849-58-7DP, trimethoxysilylpropylamine-terminated
 RL: PREP (Preparation)
 (oligomeric, manuf. of, for sealants curable at room temp. by moisture)

RN 145849-58-7 HCAPLUS

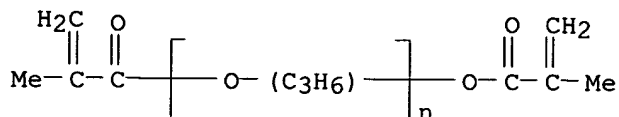
CN 1,2-Ethanediamine, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

CCI IDS, PMS



CM 2

CRN 107-15-3

CMF C2 H8 N2

H₂N-CH₂-CH₂-NH₂

L53 ANSWER 32 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1992:635391 HCAPLUS

DN 117:235391

TI Photochemically polymerizable viscoelastic compositions

IN Matsumoto, Takeo; Sakaguchi, Koji; Minoshima, Yoshihiro; Inomata, Kiyoshi

PA Nippon Oil and Fats Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-027

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 03288153 | A2 | 19911218 | JP 1990-89069 | 19900405 |
| | JP 2782909 | B2 | 19980806 | | |
| PRAI | JP 1990-89069 | | 19900405 | | |

AB The title compns. forming antiaging, odorless, nonsticky, and transparent products comprise R1(OCH₂CHR₃)nOR₂ [I; R₁ = (meth)acryloyl, maleoyl, fumaloyl, itaconoyl, vinyl, vinylbenzyl, allyl; R₂ = H, C₁-8 alkyl, C₃-8 cycloalkyl, Ph; R₃ = H, Me; n = 1-50] 100, R₄(OCH₂CHR₆)nOR₅ (R₄, R₅ = R₁; R₆ = H, Me) 0.01-30, homo- or copolymers of I 10-300, and initiators 0.01-10 parts. Thus, a compn. of methoxydiethylene glycol monomethacrylate (II) 70, triethylene glycol dimethacrylate 0.70, Me methacrylate-II copolymer 30, and an initiator 0.70 part was filled into a Teflon frame, covered with PET films, and irradiated with a halogen lamp for 10 min to give a product showing good antiaging (400 cycles 4.degree. water 1 min when 60.degree. water 1 min per cycle) viscoelasticity.

ST odorless viscoelastic polyoxyalkylene acrylate polymer; antiaging viscoelastic polyoxyalkylene acrylate polymer; transparency viscoelastic polyoxyalkylene acrylate polymer; tack free viscoelastic polyoxyalkylene acrylate polymer; acrylic polyoxyethylene polyoxypropylene viscoelastic polymer

IT Viscoelastic materials

(acrylic polyoxyethylene (and/or polyoxypropylene) polymers, odorless, antiaging, nonsticky)

IT Polyoxyalkylenes, preparation

RL: PREP (Preparation)

(polyacrylate-, viscoelastic, nontacky, antiaging, transparent, odorless)

IT Transparent materials

(viscoelastic polyoxyalkylene (meth)acrylate polymers, odorless, nonsticky)

IT 144441-94-1 144442-23-9 144442-24-0 144442-25-1 144472-81-1

144490-12-0

RL: USES (Uses)

(viscoelastic, nontacky, antiaging, **transparent**, odorless)

IT **144490-12-0**

RL: USES (Uses)

(viscoelastic, nontacky, antiaging, **transparent**, odorless)

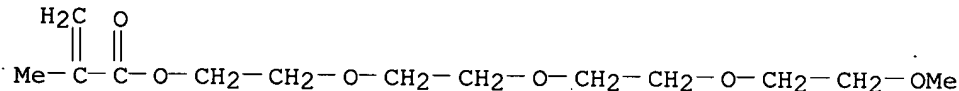
RN 144490-12-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with ethenyl acetate, 2-(2-methoxyethoxy)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.-(2-propenyloxy)poly(oxy-1,2-ethanediyl) and 3,6,9,12-tetraoxatridec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 57454-26-9

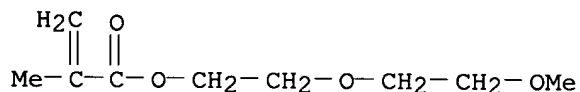
CMF C13 H24 O6



CM 2

CRN 45103-58-0

CMF C9 H16 O4

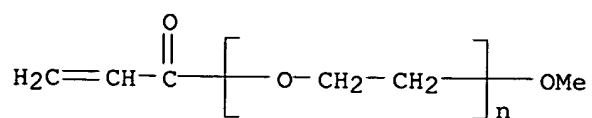


CM 3

CRN 32171-39-4

CMF (C2 H4 O)_n C4 H6 O2

CCI PMS

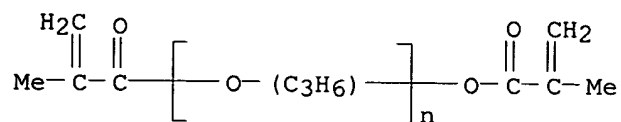


CM 4

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS

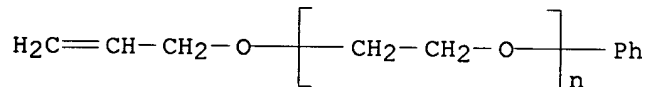


CM 5

CRN 25190-51-6

CMF (C2 H4 O)_n C9 H10 O

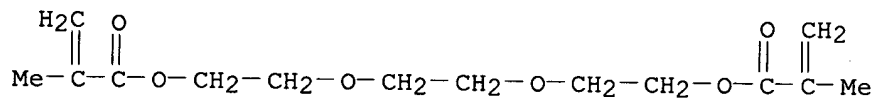
CCI PMS



CM 6

CRN 109-16-0

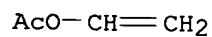
CMF C14 H22 O6



CM 7

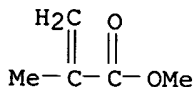
CRN 108-05-4

CMF C4 H6 O2



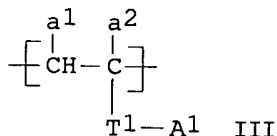
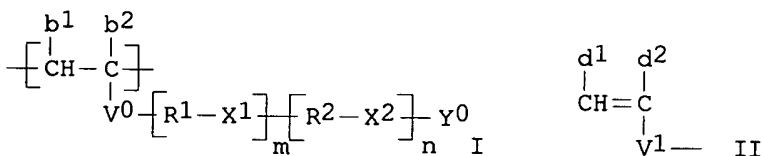
CM 8

CRN 80-62-6
CMF C5 H8 O2



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L53 ANSWER 33 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1992:540550 HCAPLUS
DN 117:140550
TI Electrostatographic liquid developer
IN Kato, Eiichi; Hattori, Hideyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03G009-13
ICA C08F002-08; C08F299-00
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
FAN.CNT 2
```

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 03142471 | A2 | 19910618 | JP 1989-279966 | 19891030 |
| | US 5073470 | A | 19911217 | US 1990-466811 | 19900118 |
| PRAI | JP 1989-7712 | | 19890118 | | |
| | JP 1989-279966 | | 19891030 | | |
| GI | | | | | |



AB The title developer comprises a nonaq. solvent having an elec. resistivity .gtoreq.102 .OMEGA..cntdot.cm, and dielec. const. .ltoreq.3.5, and dispersed resin particles. The resin particles are prepd. by polymg. a monofunctional monomer A (which is sol. in the nonaq. solvent but becomes insol. upon polymn.) and a monofunctional macromer in the presence of a dispersion stabilizer. The above macromer (no. av. mol. wt. .ltoreq.104) has the repeating unit I (V0 = O, S, COO, OCO, CH2OCO, CH2COO; Y0 = H, C1-18 hydrocarbon; X1,2 = O, CO, CO2, OCO, SO2, NY1, CONY1, NY1CO; Y1 = similar to Y0; R1,2 = (un)substituted C1-18 hydrocarbon having an

optional CHX3(R4X4)pY2; X3,4 = similar to X1,2; R4 = (un)substituted C1-18 hydrocarbon; Y2 = similar to Y0; b1,2 = H, halo, CN, hydrocarbon, COOR5; R5 = H, (un)substituted hydrocarbon; m, n, p = 0-4; m + n .gtoreq. 1), and a polymerizable double-bond terminal II (V1 = O, COO, OCO, CH2OCO, CH2COO, SO2, CONH, SO2NH, CONR6, SO2NR6, phenylene, CONHCOO, CONHCONH; R6 = H, C1-18 hydrocarbon, d1,2 = similar to b1,2). The dispersion stabilizer is a partially crosslinked polymer having the repeating unit III (T1 = COO, OCO, CH2OCO, CH2COO, O, SO2; A1 = C6-32 aliph. group; a1,2 = H, halo, CN, C1-8 hydrocarbon, COOZ1; Z1 = H, C1-18 hydrocarbon), and a double-bond terminal group polymerizable with monomer A at 1 end only of .gtoreq.1 polymer main chain(s).

ST electrophotog liq developer

IT Electrophotographic developers

(liq., manuf. of)

| | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|
| IT | 136998-47-5 | 136998-48-6 | 142939-08-0 | 142939-09-1 | 142939-10-4 |
| | 142939-11-5 | 142939-12-6 | 142939-13-7 | 142939-14-8 | 142939-15-9 |
| | 142939-16-0 | 142939-17-1 | 142939-18-2 | 142939-19-3 | 142939-20-6 |
| | 142939-27-3 | 142939-28-4 | 142939-29-5 | 142939-30-8 | 142939-31-9 |
| | 142939-32-0 | 142939-33-1 | 142939-34-2 | 142939-35-3 | 142939-36-4 |
| | 142939-37-5 | 142952-47-4 | 142952-48-5 | | |

RL: USES (Uses)

(dispersion stabilizer, in prepn. of electrophotog. liq. developer)

IT 814-68-6D, 2-Propenoyl chloride, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 920-46-7D, Methacrylic acid chloride, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 1565-41-9D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 10487-71-5D, 2-Butenoyl chloride, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 96297-71-1D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 96297-73-3D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 128454-44-4D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 128569-43-7D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer 134661-94-2D, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer

RL: USES (Uses)

(dispersion stabilizing resin from)

| | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|
| IT | 141289-05-6 | 142939-10-4 | 142939-22-8 | 142939-23-9 | 142939-24-0 |
| | 142939-25-1 | 142939-26-2 | | | |

RL: TEM (Technical or engineered material use); USES (Uses)

(electrophotog. toners contg., manuf. of)

IT 28377-02-8DP, Ethylene glycol dimethacrylate-octadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 61255-17-2DP, Divinyl benzene-dodecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 100921-04-8DP, Octadecyl methacrylate-vinyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 111930-81-5DP, Octadecyl methacrylate-polyethylene glycol dimethacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 122324-74-7DP, Divinyl benzene-octadecyl methacrylate copolymer; carboxy terminated, reaction product with allyl glycidyl ether 130805-21-9DP, Divinyl benzene-tridecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-21-9DP, Divinyl benzene-tridecyl methacrylate copolymer, hydroxy-terminated, reaction product with methacrylic acid anhydride 130805-22-0DP, carboxy terminated, reaction product with allyl glycidyl ether 130805-23-1DP,

Butyl methacrylate-divinyl benzene-octadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-24-2DP, carboxy terminated, reaction product with allyl glycidyl ether 130805-25-3DP, Divinyl benzene-octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-27-5DP, Divinyl benzene-tetradecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-28-6DP, Diethylene glycol dimethacrylate-octadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-29-7DP, Isopropenyl methacrylate-octadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-30-0DP, carboxy terminated, reaction product with allyl glycidyl ether 130805-31-1DP, Diallyl glutaconate-octadecyl methacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-32-2DP, carboxy terminated, reaction product with allyl glycidyl ether 130805-33-3DP, Octadecyl methacrylate-triethylene glycol diacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-34-4DP, Octadecyl methacrylate trivinyl benzene copolymer, carboxy terminated, reaction product with allyl glycidyl ether 130805-35-5DP, Octadecyl methacrylate-trimethylolpropane triacrylate copolymer, carboxy terminated, reaction product with allyl glycidyl ether 134240-04-3DP, Ethylene glycol diacrylate-octadecyl methacrylate copolymer, hydroxyterminated, reaction products 142939-21-7DP, carboxy terminated, reaction product with allyl glycidyl ether 143067-40-7P 143067-49-6P 143067-78-1P 143243-55-4P 143243-56-5P 143243-94-1P 143243-95-2P 143243-96-3P
 RL: PREP (Preparation); USES (Uses)

(prepn. of, as dispersion stabilizing resin, in prepn. of electrophotog. liq. developer)

IT 143067-33-8P 143067-39-4P 143067-41-8P 143067-42-9P 143067-43-0P
 143067-48-5P 143067-57-6P **143067-58-7P** 143067-79-2P
 143068-08-0P 143068-09-1P

RL: TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(prepn. of, as dispersion-stabilizing resin)

IT 139720-67-5DP, acrylamide 141289-21-6DP, carboxy terminated, reaction products 141414-88-2P 141414-90-6P 141414-91-7P 141415-05-6P
 141415-10-3P 141415-33-0P 141415-34-1P 141415-49-8P 141415-50-1P
 141415-64-7P 141415-66-9P 141415-71-6P 141415-73-8P 141415-84-1P
 141415-85-2P 141415-87-4P 141415-88-5P 141415-90-9P 141415-94-3P
 141415-96-5P 141416-07-1P 141416-13-9P 141416-19-5P 141416-33-3P
 141416-54-8P 141416-56-0P 141416-59-3P 141416-60-6P 141416-63-9P
 141416-65-1P 141417-05-2P 141417-27-8P 141668-98-6P 141759-32-2P
 143067-62-3P 143243-62-3P

RL: PREP (Preparation)

(prepn. of, as macromonomer, electrostatic liq. developer from)

IT 54468-50-7DP, ester with hydroxyterminated ethylene glycol diacrylate-octadecyl methacrylate copolymer

RL: PREP (Preparation)

(prepn. of, in manuf. of electrophotog. liq. developers)

IT **143067-58-7P**

RL: TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(prepn. of, as dispersion-stabilizing resin)

RN 143067-58-7 HCAPLUS

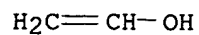
CN Butanedioic acid, mercapto-, telomer with hexadecyl 2-methyl-2-propenoate

and 1-methyl-1,2-ethanediyl bis(2-methyl-2-propenoate), ethenyl ester
(9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

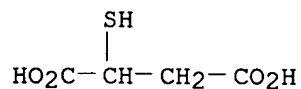
CRN 210964-52-6

CMF (C20 H38 O2 . C11 H16 O4)x . C4 H6 O4 S

CM 3

CRN 70-49-5

CMF C4 H6 O4 S



CM 4

CRN 136998-49-7

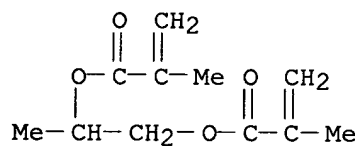
CMF (C20 H38 O2 . C11 H16 O4)x

CCI PMS

CM 5

CRN 7559-82-2

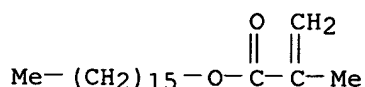
CMF C11 H16 O4



CM 6

CRN 2495-27-4

CMF C20 H38 O2



L53 ANSWER 34 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1992:107845 HCAPLUS

DN 116:107845

TI Microcapsules, their preparation and use

IN Jahns, Ekkehard; Freunds Schuh, Ulrich

PA BASF A.-G., Germany

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM B01J013-18

ICS B41M005-165

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37, 74

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 457154 | A1 | 19911121 | EP 1991-107345 | 19910507 |
| | EP 457154 | B1 | 19940309 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE | | | | |
| | DE 4015753 | A1 | 19911121 | DE 1990-4015753 | 19900516 |
| | AU 9176204 | A1 | 19911121 | AU 1991-76204 | 19910429 |
| | AU 642010 | B2 | 19931007 | | |
| | CA 2041792 | AA | 19911117 | CA 1991-2041792 | 19910503 |
| | AT 102504 | E | 19940315 | AT 1991-107345 | 19910507 |
| | ES 2062608 | T3 | 19941216 | ES 1991-107345 | 19910507 |
| | BR 9101956 | A | 19911224 | BR 1991-1956 | 19910513 |
| | FI 9102364 | A | 19911117 | FI 1991-2364 | 19910515 |
| | JP 04227845 | A2 | 19920817 | JP 1991-110007 | 19910515 |
| | JP 3241396 | B2 | 20011225 | | |
| | US 5292835 | A | 19940308 | US 1993-93996 | 19930721 |
| PRAI | DE 1990-4015753 | A | 19900516 | | |
| | EP 1991-107345 | A | 19910507 | | |
| | US 1991-699526 | B2 | 19910514 | | |
| | US 1992-896870 | B1 | 19920612 | | |

AB Microcapsules for pressure-sensitive recording materials and color formers were obtained by copolymn. of C1-24-alkyl (meth)acrylate 30-100, polyfunctional monomer sol. in solvents relatively immiscible with water 0-80, and special monomer 0-40%. The solvent **optionally** together with the monomer and a radical initiator is the disperse phase in an oil-in-water emulsion and the polymn. is initiated by thermal decompn. of the initiator. Thus, a mixt. of H₂O 1280, poly(vinylpyrrolidinone) 20, phenolsulfonic acid-HCHO condensate 15, diisopropyl naphthalene 522, dodecylbenzene 522, 3,3-bis(p-(dimethylamino)phenyl]-6-(dimethylamino)phthalide 36, N-benzoylleucomethylene blue 12, Me methacrylate 168, butanediol diacrylate 19, AIBN 1.4, and di-Me 2,2'-azodiisobutyrate 2 g was stirred 20 min at room temp. and heated 1.5 h at 60.degree. and 4 h at 65.degree.. The resulting color-former-contg. acrylic polymer microcapsules had a size of 3-7 .mu.m.

ST acrylic microcapsule emulsion polymn; microencapsulation color former; pressure sensitive recording material

IT Copying paper
(microencapsulation of color formers for, by emulsion radical polymn.)

IT Dyes
(color formers, encapsulation of, by emulsion radical polymn.)

IT Polymerization
(emulsion, radical, for encapsulation of color formers)

IT Capsules
(micro-, for color formers, prepn. of, by emulsion radical polymn.)

IT 9011-14-7P, Poly(methyl methacrylate) 25852-37-3P, Butyl acrylate-methyl methacrylate copolymer 27901-88-8P, Acetoacetoxyethyl methacrylate-methyl methacrylate copolymer 64772-97-0P, Hexanediol diacrylate-methyl methacrylate copolymer 139196-60-4P
139196-61-5P 139204-41-4P
RL: **PREP (Preparation)**
(emulsion radical manuf. of, during microencapsulation)

IT 123-01-3, Dodecylbenzene 38640-62-9, Diisopropylnaphthalene
RL: **USES (Uses)**
(in microencapsulation by radical emulsion polymn.)

IT 301-08-6, Lead bis(2-ethylhexanoate) 1249-97-4, N-Benzoylleucomethylene blue 1552-42-7, 3,3-Bis[p-(dimethylamino)phenyl]-6-(dimethylamino)phthalide 51218-45-2, Metolachlor
RL: **PROC (Process)**
(microencapsulation of, by radical emulsion polymn. of acrylic monomers)

IT **139196-61-5P**
RL: **PREP (Preparation)**
(emulsion radical manuf. of, during microencapsulation)

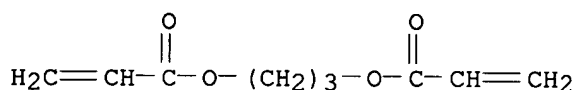
RN 139196-61-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 24493-53-6

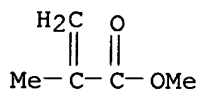
CMF C9 H12 O4



CM 2

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 35 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1992:42784 HCAPLUS

DN 116:42784

TI Method for producing polyurethane flexible foam
 IN Takeyasu, Hiromitsu; Kozawa, Sigeyuki
 PA Asahi Glass Co., Ltd., Japan
 SO Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM C08G018-67
 ICS C08G018-66; C08G018-48; C08G018-76
 ICI C08G018-67, C08G101-00
 CC 38-3 (Plastics Fabrication and Uses)
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 443614 | A2 | 19910828 | EP 1991-102646 | 19910222 |
| | EP 443614 | A3 | 19920226 | | |
| | R: DE, FR, GB, IT | | | | |
| | JP 03244620 | A2 | 19911031 | JP 1990-40959 | 19900223 |
| | US 5300535 | A | 19940405 | US 1991-659259 | 19910222 |
| PRAI | JP 1990-40959 | | 19900223 | | |
| | JP 1988-267297 | | 19881025 | | |
| | JP 1989-29644 | | 19890210 | | |
| | US 1989-499346 | | 19891018 | | |
| AB | Flexible polyurethane foams having excellent phys. properties as a seat cushion for automobiles are prep'd. by the reaction of polyoxyalkylene polyol (OH value 5-38 mgKOH/g, 2-8 OH groups, total unsatn. degree < 0.07 mequiv/g) and/or polymer-dispersed polyol contg. the polyoxyalkylene polyol as the matrix with polyisocyanate and optionally a crosslinking agent in the presence of a low-viscosity comp'd. having an addn.-polymerizable unsatd. group, a catalyst, a blowing agent, and a foam stabilizer. Thus, reaction of polyoxypropylene-polyoxyethylene (no. of OH groups 3, oxyethylene content 15%, total unsatn. degree 0.020 mequiv/g, OH value 24 mgKOH/g, viscosity 1900 cP) with TDI-80 in the presence of water 4, Dabco 33LV as catalyst 0.4, N-ethylmorpholine as catalyst 0.4, L-5309 as foam stabilizer 1.2, and methoxydiethylene glycol methacrylate (I) (viscosity 80 cP) 5 parts gave a polyurethane foam with d. 35 kg/m ² , impact resilience 68%, elongation 130%, wet heat permanent strain 9%, resonant frequency 3.2 Hz, and 6 Hz transmittance 0.45, vs. 35, 60, 115, 11, 3.5, and 0.55, resp., without I. | | | | |
| ST | polyurethane foam manuf; polyoxypropylene polyoxyethylene TDI copolymer; methoxydiethylene glycol methacrylate diluent polyurethane; phys strength polyurethane foam | | | | |
| IT | Urethane polymers, preparation RL: PREP (Preparation) (glycol methacrylate diluent mixts., flexible foams, manuf. of) | | | | |
| IT | 9052-50-0P, Ethylene oxide-propylene oxide-TDI copolymer RL: PREP (Preparation) (methoxydiethylene glycol methacrylatediluent mixts., cellular, flexible, manuf. of) | | | | |
| IT | 138432-27-6P RL: PREP (Preparation) (methoxydipropylene glycol methacrylate diluent mixts., cellular, flexible, manuf. of) | | | | |
| IT | 7559-82-2P 45103-58-0P 138367-28-9P RL: PREP (Preparation) (polyurethane mixts., cellular, flexible, manuf. of) | | | | |
| IT | 25766-14-7P RL: PREP (Preparation) | | | | |

(propylene glycol dimethacrylate diluent mixts., cellular, flexible, manuf. of)

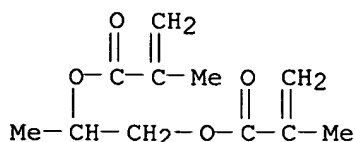
IT 7559-82-2P

RL: PREP (Preparation)

(polyurethane mixts., cellular, flexible, manuf. of)

RN 7559-82-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



L53 ANSWER 36 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1990:204784 HCAPLUS

DN 112:204784

TI Acrylic copolymers for preparation of contact **lenses** and method of making them

IN Burke, William J.; Folk, Lisa; Ratkowski, Donald J.

PA Pilkington Visioncare, Inc., USA

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C08F291-00

ICS G02B001-04; C08F265-00; C08F275-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 35, 38

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 345994 | A2 | 19891213 | EP 1989-305491 | 19890531 |
| | EP 345994 | A3 | 19910320 | | |
| | EP 345994 | B1 | 19950802 | | |
| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | JP 02140718 | A2 | 19900530 | JP 1989-134845 | 19890530 |
| | CA 1318446 | A1 | 19930525 | CA 1989-601116 | 19890530 |
| | ES 2077580 | T3 | 19951201 | ES 1989-305491 | 19890531 |
| | US 5505884 | A | 19960409 | US 1995-440712 | 19950515 |
| | US 5519069 | A | 19960521 | US 1995-469502 | 19950606 |
| PRAI | US 1988-200744 | | 19880531 | | |
| | US 1991-758786 | | 19910912 | | |
| | US 1993-139460 | | 19931020 | | |

AB A method of producing contact **lens** material comprises; (1) prepn. of a first and second mixt. of polymerizable vinyl monomers, (2) interrupting the polymn. of the first mixt. at the relative viscosity (the viscosity of the partially polyimd. 1st mixt. divided by the viscosity of the initial mixt.) of .apprx.1.05-10, (3) admixing the partially polyimd. first mixt. with the second mixt. to create a casting soln.; and (4) polymg. molded casting soln. in heat to create a solid **lens** material. The 2-stage polymn. of the monomers results in an interpenetrating network copolymers and the contact **lenses** prepd. from the copolymers have the clarity, dimensional stability, O

permeability, wettability, **optics**, and durability designed for either daily or extended wear. A mixt. contg. Me methacrylate, .alpha.-methacryloxypropyl-tris(trimethylsiloxy)silane, bis(trimethylsiloxy)methacryloxypropylsilanol, 1,3-bis(methacryloxypropyl)-1,1,3,3-tetrakis(trimethylsiloxy)disiloxane, methacrylic acid, and 2,2'-azobis(isobutyronitrile) was warmed to 35.degree. and purged with dry N and polymn. was permitted to proceed until the relative viscosity of 1.40 was reached. At that point the second mixt. contg. Me methacrylate, .gamma.-methacryloxypropyl-tris(trimethylsiloxy)silane, ethylene glycol dimethacrylate, and 1,1,3,3-tetrakis(trimethylsiloxy)disiloxane was added to the partially polymd. first mixt. in the presence of air to stop the polymn. thereof. The resulting mixt. was added to plastic molds and the filled molds were heated in N and gradually raised to 70.degree. and maintained at that temp. for 10 h. The contact **lens** were then cut to desired dimension and polished to an **optical** surface. The resulting contact **lenses** were durable, readily wettable and resistant to surface deposits.

ST contact **lens** acrylic polymer

IT **Lenses**

(contact, acrylic copolymers for, multistage polymn. in)

IT 126895-85-0P 126895-86-1P 126895-87-2P 126895-88-3P 126895-89-4P

126895-90-7P 126895-91-8P 126895-92-9P **126895-93-0P**

RL: **PREP (Preparation)**

(prepn. of, by two-stage polymn., for contact **lens**)

IT **126895-93-0P**

RL: **PREP (Preparation)**

(prepn. of, by two-stage polymn., for contact **lens**)

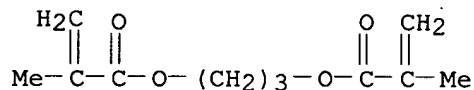
RN 126895-93-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanedioxy-2,1-ethanedioyl) ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate and 1,3-propanedioyl bis(2-methyl-2-propenoate) (9CI)
(CA INDEX NAME)

CM 1

CRN 1188-09-6

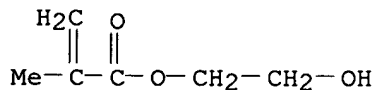
CMF C11 H16 O4



CM 2

CRN 868-77-9

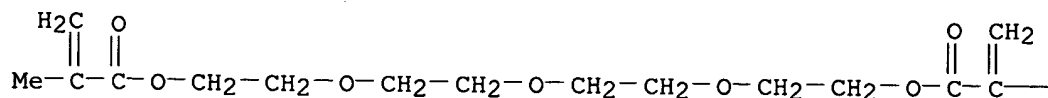
CMF C6 H10 O3



CM 3

CRN 109-17-1
CMF C16 H26 O7

PAGE 1-A

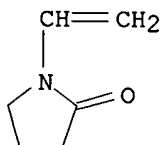


PAGE 1-B

— Me

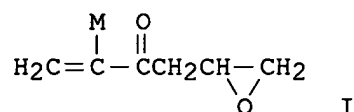
CM 4

CRN 88-12-0
CMF C6 H9 N O



L53 ANSWER 37 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1988:637089 HCAPLUS
DN 109:237089
TI Manufacture of hydrophilic hard contact **lenses** from acrylic copolymers
IN Umeda, Kazuo
PA Yamato Jushi Kogaku K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G02C007-04
ICA C08F220-10; C08F220-20; C08F220-32; C08F230-08; C08J007-14
CC 63-7 (Pharmaceuticals)
FAN.CNT 1

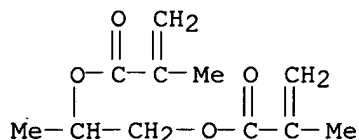
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 63091622 | A2 | 19880422 | JP 1986-236262 | 19861006 |
| | JP 05055850 | B4 | 19930818 | | |
| PRAI | JP 1986-236262 | | 19861006 | | |
| OS | MARPAT 109:237089 | | | | |
| GI | | | | | |



- AB A hard contact lens is prepd. from a copolymer contg. the following 3 components: (1) 0-80 parts by wt. $\text{H}_2\text{C}=\text{CMCO}_2\text{R}$ (M = H or Me; R = linear or branched alkyl, siloxanylalkyl, fluoroalkyl), (2) 10-80 parts I (M = H or Me), and (3) 0-2 parts $\text{H}_2\text{C:CMCO}_2\text{CHMCH}_2\text{O}_2\text{CC(M):CH}_2$ (M = H or Me), by treating the copolymer with a mineral acid, making the surface hydrophilic. Me methacrylate 50, glycidyl methacrylate 49, propylene glycol dimethacrylate 1 part by wt. were mixed with a polymn. initiator, azobisisobutyronitrile 0.2 parts were mixed and polymd. at 80.degree., and the viscosity was increased to 1500-2000 CP. This copolymer was made into a rod (diam. 18 mm). The rod was heated to 100.degree. for 2 h. A contact lens was prepd. from the rod, treated with a soln. consisting of concd. H_2SO_4 20, EtOH 30, and H_2O 50 parts, for 60 min at 45.degree., and then treated with another soln. consisting of H_3BO_3 1.5, borax 1.0, EtOH 30.0, and H_2O 68.5 parts, and finally washed with H_2O .
- ST contact lens acrylic polymer hydrolysis
- IT Lenses
(contact, hard, hydrophilic, manuf. of, from acrylic polymers)
- IT 25766-58-9DP, hydrolyzed 117675-78-2DP, hydrolyzed
117686-04-1DP, hydrolyzed
RL: THU (Therapeutic use); BIOL (Biological study); **PREP**
(Preparation); USES (Uses)
(prepn. of, for contact lens)
- IT 117675-78-2DP, hydrolyzed
RL: THU (Therapeutic use); BIOL (Biological study); **PREP**
(Preparation); USES (Uses)
(prepn. of, for contact lens)
- RN 117675-78-2 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, polymer with methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

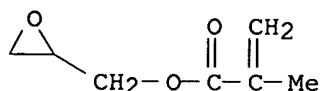
CM 1

CRN 7559-82-2
CMF C11 H16 O4



CM 2

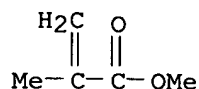
CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 38 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1987:577114 HCAPLUS

DN 107:177114

TI Manufacture of acrylate copolymers

IN Maeda, Tetsuo

PA Denki Kagaku Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F220-10

ICI C08F220-10, C08F220-20

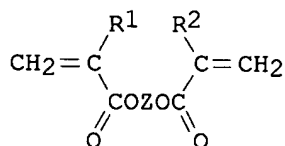
CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 35, 38

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 62041209 | A2 | 19870223 | JP 1985-179505 | 19850816 |
| | JP 04055602 | B4 | 19920903 | | |
| PRAI | JP 1985-179505 | | 19850816 | | |

GI



I

AB Copolymers having soly. parameter (SP) 8.4-9.8 (cal/cm³)^{0.5}, glass-transition temp. (T_g) 10-20.degree., and gel content (G) 10-70%, yielding moldings with good chem. resistance and exfoliation prevention, are prep'd. by polymn. of acrylate esters, other monomers (optional), and 0.01-10 parts (based on 100 parts monomers) CH₂:CR₁CO₂ZO₂CCR₂:CH₂ [I; R₁, R₂ = H, Me; Z = (CH₂CHR₃O)_n-1CH₂CHR₃; n .gtoreq. 2; R₃ = H, Me]. A mixt. of Bu acrylate 70, Me methacrylate 30, and I (n = 9; R₁ = R₂ = R₃ = Me) 0.50 part was continuously fed to a

reactor contg. H₂O, K₂S₂O₈, and salt at 70.degree. for 5 h, and heated for 2 h to form a polymer having SP 9.0 (cal/cm³)0.5, T_g -18.degree., and G 0.26%. The polymer was mixed with ABS and acrylonitrile-styrene copolymer, extruded, and injection-molded at 200.degree. to form a product showing environmental stress cracking resistance (ASTM D 638, in HOCH₂CH₂OEt at 23.degree.) >300 min, and no exfoliation, vs. 2.2 min using a polymer with T_g 55.degree. or obvious exfoliation without the I.

ST polypropylene glycol diacrylate copolymer prepn; chem resistance crosslinked acrylate polymer; environmental stress cracking resistance polymer; ABS exfoliation prevention

IT Plastics, molded
RL: USES (Uses)
(ABS blends with glycol di(meth)acrylate-crosslinked polyacrylates, for exfoliation prevention)

IT Chemically resistant materials
(ABS blends with glycol di(meth)acrylate-crosslinked polyacrylates)

IT Exfoliation
(prevention of, in ABS blends, by glycol di(meth)acrylate-crosslinked polyacrylates)

IT 9003-54-7, Acrylonitrile-styrene copolymer 25747-74-4, Acrylonitrile-.alpha.-methylstyrene copolymer
RL: USES (Uses)
(blends with ABS and glycol di(meth)acrylate-crosslinked polyacrylates, for good chem. resistance and exfoliation prevention)

IT 106677-58-1
RL: USES (Uses)
(blends with glycol di(meth)acrylate-crosslinked polyacrylates, for good chem. resistance and exfoliation prevention)

IT 50657-38-0P, Butyl acrylate-methyl methacrylate-tetraethylene glycol dimethacrylate copolymer 56938-23-9P 109358-86-3P 109358-87-4P 109359-10-6P, Butyl acrylate-methyl methacrylate-triethylene glycol diacrylate copolymer 109422-53-9P 109422-61-9P 109422-62-0P 109422-63-1P 109422-64-2P 109422-65-3P 109422-66-4P 109422-67-5P 109422-68-6P 109422-69-7P
RL: PREP (Preparation)
(manuf. of, for ABS blends with good chem. resistance and exfoliation prevention)

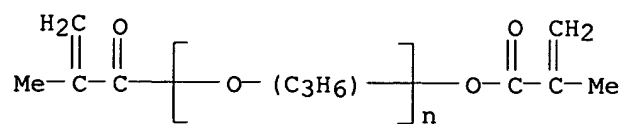
IT 109422-53-9P 109422-61-9P 109422-62-0P 109422-63-1P 109422-64-2P 109422-65-3P 109422-66-4P 109422-67-5P 109422-68-6P
RL: PREP (Preparation)
(manuf. of, for ABS blends with good chem. resistance and exfoliation prevention)

RN 109422-53-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

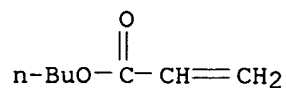
CRN 25852-49-7
CMF (C₃ H₆ O)_n C₈ H₁₀ O₃
CCI IDS, PMS



CM 2

CRN 141-32-2

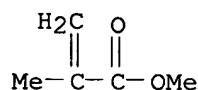
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 109422-61-9 HCAPLUS

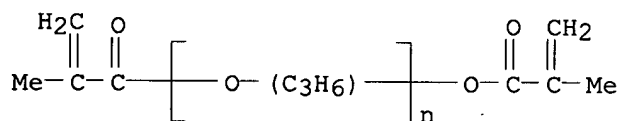
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

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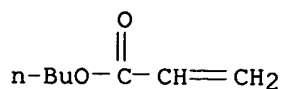
CCI IDS, PMS



CM 2

CRN 141-32-2

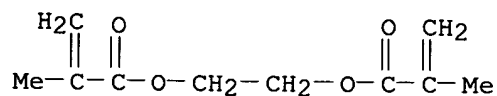
CMF C7 H12 O2



CM 3

CRN 97-90-5

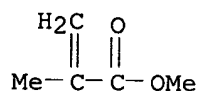
CMF C10 H14 O4



CM 4

CRN 80-62-6

CMF C5 H8 O2



RN 109422-62-0 HCAPLUS

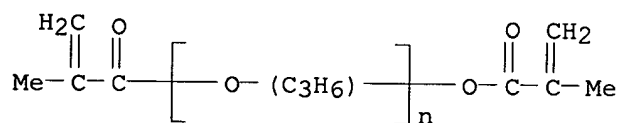
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-
2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and 2-propenenitrile (9CI)
(CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

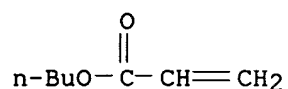
CCI IDS, PMS



CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 107-13-1

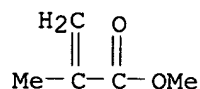
CMF C3 H3 N



CM 4

CRN 80-62-6

CMF C5 H8 O2



RN 109422-63-1 HCAPLUS

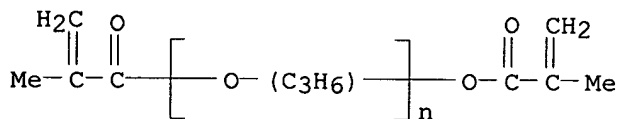
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

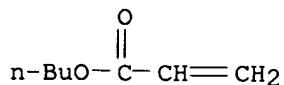
CCI IDS, PMS



CM 2

CRN 141-32-2

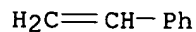
CMF C7 H12 O2



CM 3

CRN 100-42-5

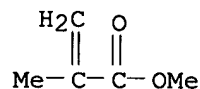
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



RN 109422-64-2 HCAPLUS

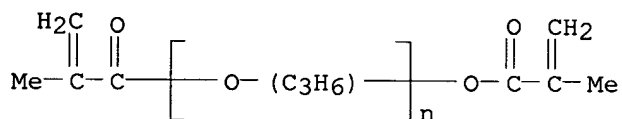
CN 2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

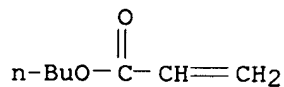
CCI IDS, PMS



CM 2

CRN 141-32-2

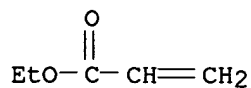
CMF C7 H12 O2



CM 3

CRN 140-88-5

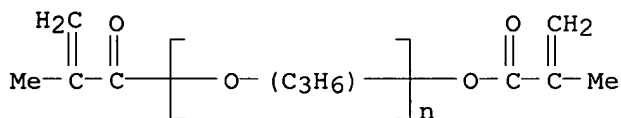
CMF C5 H8 O2



RN 109422-65-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, ethyl 2-propenoate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

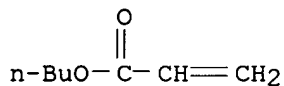
CM 1

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



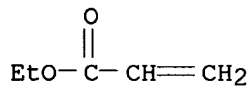
CM 2

CRN 141-32-2
 CMF C7 H12 O2



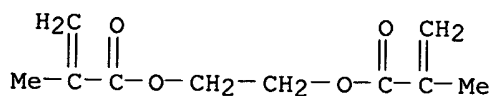
CM 3

CRN 140-88-5
 CMF C5 H8 O2



CM 4

CRN 97-90-5
 CMF C10 H14 O4



RN 109422-66-4 HCAPLUS

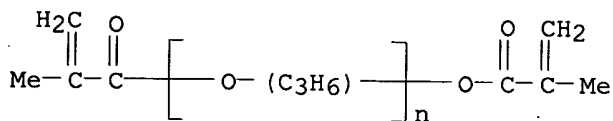
CN 2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

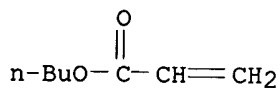
CCI IDS, PMS



CM 2

CRN 141-32-2

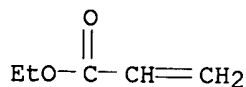
CMF C7 H12 O2



CM 3

CRN 140-88-5

CMF C5 H8 O2



CM 4

CRN 107-13-1

CMF C3 H3 N



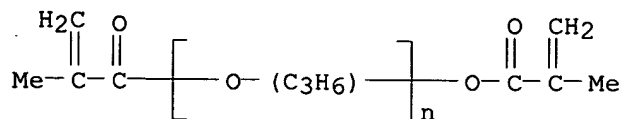
RN 109422-67-5 HCAPLUS
 CN 2-Propenoic acid, ethyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

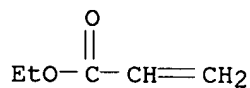
CCI IDS, PMS



CM 2

CRN 140-88-5

CMF C5 H8 O2



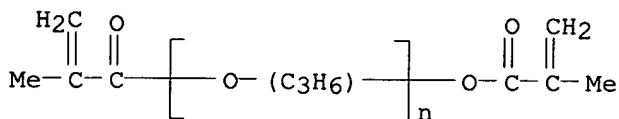
RN 109422-68-6 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

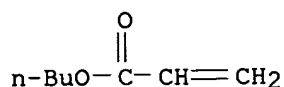
CCI IDS, PMS



CM 2

CRN 141-32-2

CMF C7 H12 O2



L53 ANSWER 39 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1987:516652 HCAPLUS

DN 107:116652

TI Hardenable vinyl alcohol copolymer compositions

IN Maruhashi, Kiichi; Oishi, Tsukasa

PA Nippon Synthetic Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F002-44

ICA C08F261-04; G03C001-68; G03F007-10

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

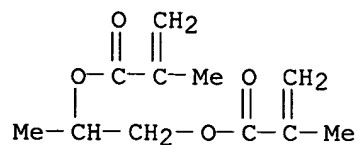
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | JP 62010103 | A2 | 19870119 | JP 1985-148981 | 19850705 |
| PRAI | JP 1985-148981 | | 19850705 | | |
| AB | Title compns. with good flexibility contain vinyl alc. copolymer with block character (sic) [.eta.] .gtoreq.0.55, polymerizable vinyl compds., and initiators. Thus, poly(vinyl alc.) (I; .eta. 0.7; sapon. degree 80 mol%; d.p. 800) 100, water 100, .beta.-hydroxyethyl methacrylate 90, propylene glycol dimethacrylate 10, benzoin iso-Pr ether 3, and hydroquinone 1 part were mixed to obtain a viscous soln., which was applied onto a 200--mu. polyester film and exposed to a 3 kW high-pressure Hg lamp at a distance 70 cm for 40 s to obtain a 750-.mu. transparent and smooth film with good flexibility, while a film prepd. similarly using I with .eta. 0.45 was rigid and brittle. | | | | |
| ST | hardenable vinyl polymer flexibility transparent; polyvinyl alc monomer blend curable; coating vinyl polymer flexibility transparency; film vinyl polymer flexibility transparency | | | | |
| IT | Transparent materials | | | | |
| | (vinyl polymer-sapond. poly(vinyl alc.) blends, flexible) | | | | |
| IT | Coating materials | | | | |
| | (vinyl polymer-sapond. poly(vinyl alc.) blends, flexible and transparent) | | | | |
| IT | 110215-52-6 | | | | |
| | RL: USES (Uses) | | | | |
| | (vinyl alc. copolymer blends, transparent) | | | | |
| IT | 9002-89-5, Poly(vinyl alcohol) 25213-24-5, Vinyl acetate-vinyl alcohol copolymer 29613-70-5, Ethylene oxide-vinyl alcohol copolymer | | | | |
| | RL: USES (Uses) | | | | |
| | (vinyl polymer blend, curable, and transparent) | | | | |
| IT | 110215-52-6 | | | | |
| | RL: USES (Uses) | | | | |
| | (vinyl alc. copolymer blends, transparent) | | | | |
| RN | 110215-52-6 HCAPLUS | | | | |
| CN | 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) | | | | |

CM 1

CRN 7559-82-2

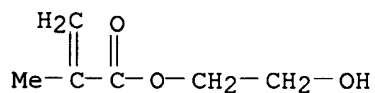
CMF C11 H16 O4



CM 2

CRN 868-77-9

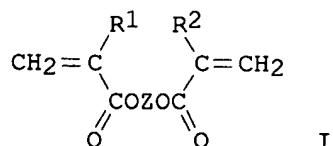
CMF C6 H10 O3



L53 ANSWER 40 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1987:460018 HCAPLUS
 DN 107:60018
 TI Manufacture of fatty acid vinyl ester copolymers
 IN Maeda, Tetsuo
 PA Denki Kagaku Kogyo K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08F218-04
 ICI C08F218-04, C08F220-20
 CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 35, 38

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 62041208 | A2 | 19870223 | JP 1985-179506 | 19850816 |
| PRAI | JP 1985-179506 | | 19850816 | | |
| GI | | | | | |



AB Copolymers having soly. parameter (SP) 8.4-9.8 (cal/cm³)0.5,
 glass-transition temp. (T_g) .ltoreq.20.degree., and gel content (G)

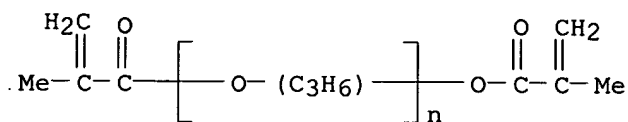
- .ltoreq.70%, useful for moldings with good chem. resistance and exfoliation prevention, are prepd. by polymn. of fatty acid vinyl esters, other monomers (optional), and 0.01-10 parts (based on total monomers) CH₂:CR1CO₂ZO₂CCR₂:CH₂ [I; R₁, R₂ = H, Me; Z = (CH₂CHR₃)_n-1CH₂CHR₃; n .gtoreq. 2; R₃ = H, Me]. C₂H₄ (15 parts) was fed to a reactor contg. H₂O, K₂S₂O₈, and poly(vinyl alc.), continuously treated with a mixt. of 85 parts vinyl acetate and 1.00 part I (n = 9, R₁ = R₂ = R₃ = Me) for 10 h, and heated at 70.degree. for 5 h to form a polymer having SP 9.2 (cal/cm³)0.5, Tg 2.degree., and G 16%. The polymer was mixed with ABS resin and acrylonitrile-styrene copolymer, extruded, and injection-molded at 200.degree. to form a product showing environmental stress cracking resistance (ASTM D 638; in HOCH₂CH₂OEt at 23.degree.) >300 min and no exfoliation, vs. 8.9 min using a polymer with Tg 27.degree. or obvious exfoliation without the I.
- ST fatty acid vinyl ester copolymer; vinyl acetate copolymer; exfoliation prevention vinyl acetate polymer; ABS blend vinyl acetate copolymer; environmental stress cracking resistance polymer
- IT Chemically resistant materials
(glycol di(meth)acrylate-crosslinked vinyl acetate copolymer blends with ABS resins)
- IT Plastics, molded
RL: USES (Uses)
(glycol di(meth)acrylate-crosslinked vinyl acetate copolymer blends with ABS resins, chem. resistant)
- IT Exfoliation
(prevention of, in ABS resin blends with fatty acid vinyl ester copolymers)
- IT Fatty acids, esters
RL: USES (Uses)
(vinyl esters, polymers, ABS blends, for good chem. resistance and exfoliation prevention)
- IT 9003-54-7, Acrylonitrile-styrene copolymer 25747-74-4, Acrylonitrile-.alpha.-methylstyrene copolymer
RL: USES (Uses)
(blends with ABS and glycol di(meth)acrylate-crosslinked vinyl acetate copolymers)
- IT 106677-58-1
RL: USES (Uses)
(blends with glycol di(meth)acrylate-crosslinked vinyl acetate copolymers, for good chem. resistance and exfoliation prevention)
- IT 35725-67-8P 108762-06-7P 109358-85-2P 109359-11-7P 109359-12-8P
109422-54-0P 109422-55-1P 109422-56-2P
109422-57-3P 109422-58-4P 109422-59-5P
109422-60-8P
RL: PREP (Preparation)
(manuf. of, for ABS resin blends with good chem. resistance and exfoliation prevention)
- IT 109422-54-0P 109422-55-1P 109422-56-2P
109422-57-3P 109422-58-4P 109422-60-8P
RL: PREP (Preparation)
(manuf. of, for ABS resin blends with good chem. resistance and exfoliation prevention)
- RN 109422-54-0 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with ethene, ethenyl acetate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

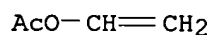
CCI IDS, PMS



CM 2

CRN 108-05-4

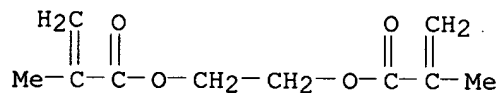
CMF C4 H6 O2



CM 3

CRN 97-90-5

CMF C10 H14 O4



CM 4

CRN 74-85-1

CMF C2 H4



RN 109422-55-1 HCAPLUS

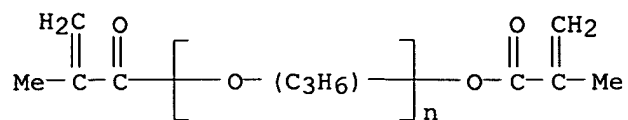
CN 2-Propenoic acid, butyl ester, polymer with ethene, ethenyl acetate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

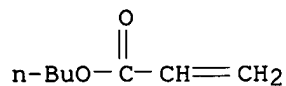
CCI IDS, PMS



CM 2

CRN 141-32-2

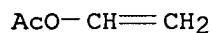
CMF C7 H12 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



CM 4

CRN 74-85-1

CMF C2 H4



RN 109422-56-2 HCAPLUS

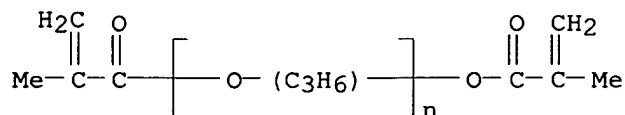
CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

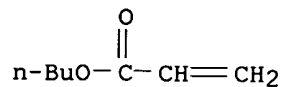
CMF (C3 H6 O)_n C8 H10 O3

CCI IDS, PMS



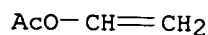
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

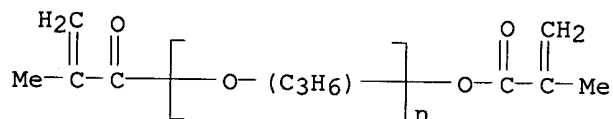
CRN 108-05-4
CMF C4 H6 O2



RN 109422-57-3 HCAPLUS
CN Acetic acid ethenyl ester, polymer with ethene, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and 2-propenenitrile (9CI) (CA INDEX NAME)

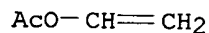
CM 1

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



CM 2

CRN 108-05-4
CMF C4 H6 O2



CM 3

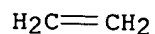
CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 74-85-1

CMF C2 H4



RN 109422-58-4 HCAPLUS

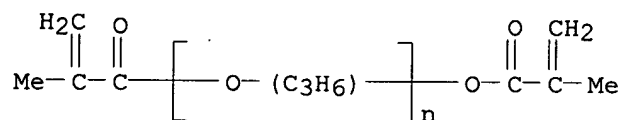
CN Dodecanoic acid, ethenyl ester, polymer with ethene, ethenyl acetate and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

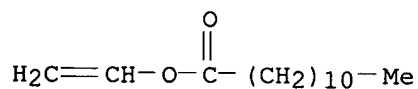
CCI IDS, PMS



CM 2

CRN 2146-71-6

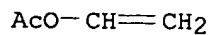
CMF C14 H26 O2



CM 3

CRN 108-05-4

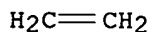
CMF C4 H6 O2



CM 4

CRN 74-85-1

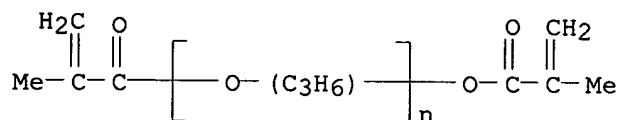
CMF C2 H4



RN 109422-60-8 HCAPLUS
 CN Acetic acid ethenyl ester, polymer with ethene and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

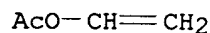
CM 1

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 2

CRN 108-05-4
 CMF C4 H6 O2



CM 3

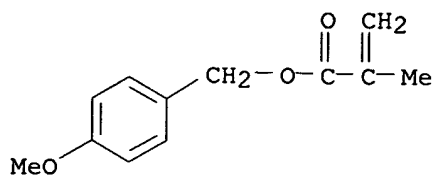
CRN 74-85-1
 CMF C2 H4



L53 ANSWER 41 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1987:125913 HCAPLUS
 DN 106:125913
 TI Water-containing contact lens
 IN Tarumi, Jiro; Komiya, Shigeo; Sawamoto, Takeyuki
 PA Hoya Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G02B001-04
 ICS G02C007-04
 ICA C08F226-08
 CC 63-7 (Pharmaceuticals)
 FAN.CNT 1

| | | | | |
|------------|------|------|-----------------|------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|

 PI JP 61205901 A2 19860912 JP 1985-46414 19850311
 JP 2543334 B2 19961016
 PRAI JP 1985-46414 19850311
 AB Contact **lenses** are prepd. by combining the following 4 components: (1) N-vinylpyrrolidone 60-95, (2) .gtoreq.1 hydrophobic monomer 5-40, (3) an unsatd. carboxylic acid 0-20, and (4) .gtoreq.1 crosslinking agent 0.02-3.0% by wt. The hydrophobic monomer is selected from the group consisting of Ph acrylates, benzyl acrylates, Ph methacrylates, phenoxyethyl acrylate, cyclohexyl methacrylate, etc. The crosslinking agent is selected from the group consisting of CH₂:CXC02(CH₂CH₂O)aCOCX:CH₂ (X = H, Me; a = 3-23), CH₂:CXC02(CH₂CH₂CH₂O)bCOCX:CH₂ (X = H, Me; b = 2-14), and CH₂:CXC02(CH₂CHCHMeO)cCOCX:CH₂ (X = H, Me; c = 3-14). These **lenses** can hold a large amt. of H₂O, yet have strong mech. strength. Thus, N-vinylpyrrolidone 90, benzyl methacrylate 10, tetraethylene glycol dimethacrylate 0.5, and azobisvaleronitrile 0.5 part by wt. were mixed and molded into shape. The mold was sealed, heated from 30.degree. to 115.degree. in 24 h to give a colorless, transparent copolymer for contact **lens**. The water adsorption was 78%, the O permeation coeff. 53 .times. 10-11 mL.cntdot.cm/cm².cntdot.s.cntdot.mmHg (30.degree.), and the tensile strength of H₂O-contg. **lens** 200 g/mm².
 ST contact **lens** acrylic copolymer
 IT Crosslinking agents
 (for acrylate polymers, for contact **lenses**)
 IT **Lenses**
 (contact, acrylate crosslinked copolymers for, with high water absorption)
 IT 107066-90-0P 107066-91-1P 107066-92-2P 107087-31-0P 107087-32-1P
 107161-34-2P 107161-35-3P 107161-36-4P
 107161-37-5P 107173-47-7P 107173-48-8P
 RL: THU (Therapeutic use); BIOL (Biological study); **PREP**
 (**Preparation**); **USES** (Uses)
 (prepn. of, as contact **lens** material)
 IT 107161-34-2P 107161-35-3P 107161-36-4P
 107161-37-5P
 RL: THU (Therapeutic use); BIOL (Biological study); **PREP**
 (**Preparation**); **USES** (Uses)
 (prepn. of, as contact **lens** material)
 RN 107161-34-2 HCAPLUS
 CN Butanedioic acid, methylene-, polymer with 1-ethenyl-2-pyrrolidinone, (4-methoxyphenyl)methyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)
 CM 1
 CRN 58986-02-0
 CMF C12 H14 O3

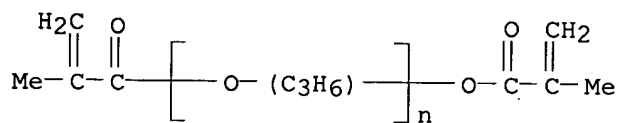


CM 2

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

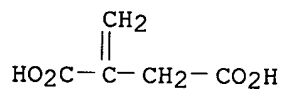
CCI IDS, PMS



CM 3

CRN 97-65-4

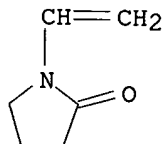
CMF C5 H6 O4



CM 4

CRN 88-12-0

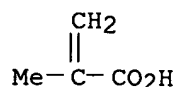
CMF C6 H9 N O



CM 5

CRN 79-41-4

CMF C4 H6 O2



RN 107161-35-3 HCAPLUS

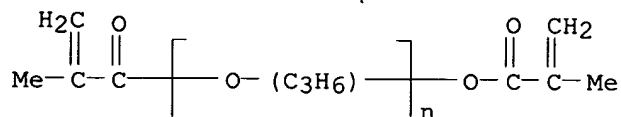
CN 2-Propenoic acid, 2-methyl-, phenylmethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 25852-49-7

CMF (C3 H6 O)n C8 H10 O3

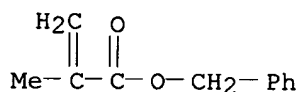
CCI IDS, PMS



CM 2

CRN 2495-37-6

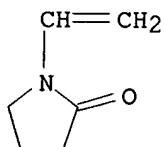
CMF C11 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



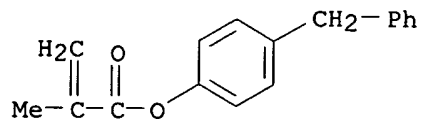
RN 107161-36-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], 4-(phenylmethyl)phenyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 58986-06-4

CMF C17 H16 O2

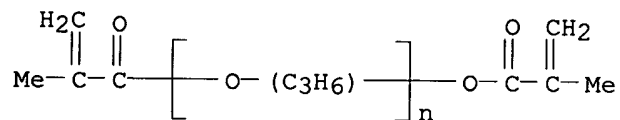


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

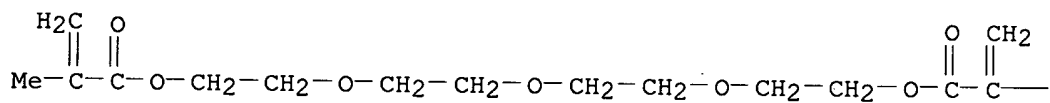
CCI IDS, PMS



CM 3

CRN 109-17-1

CMF C16 H26 O7



PAGE 1-A

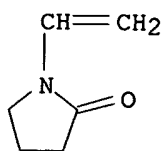
PAGE 1-B

—Me

CM 4

CRN 88-12-0

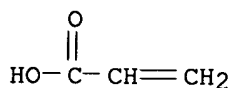
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



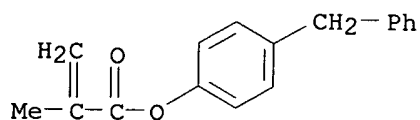
RN 107161-37-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 4-(phenylmethyl)phenyl ester, polymer with 1-ethenyl-2-pyrrolidinone and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 58986-06-4

CMF C17 H16 O2

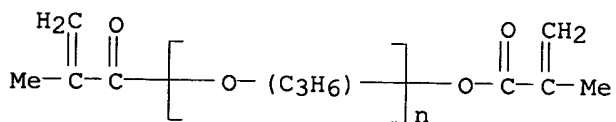


CM 2

CRN 25852-49-7

CMF (C3 H6 O)_n C8 H10 O3

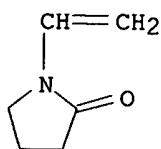
CCI IDS, PMS



CM 3

CRN 88-12-0

CMF C6 H9 N O



- L53 ANSWER 42 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1983:540467 HCAPLUS
 DN 99:140467
 TI Radiation processing of polymer emulsion. VI. Preparation of thermosettable emulsion
 AU Makuuchi, Keizo; Takagi, Toru; Egusa, Shigenori
 CS Takasaki Radiat. Chem. Res. Establ., Japan At. Energy Res. Inst., Takasaki, 370-12, Japan
 SO Shikizai Kyokaishi (1983), 56(7), 443-8
 CODEN: SKYQAO; ISSN: 0371-0777
 DT Journal
 LA Japanese
 CC 35-3 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 42
 AB Thermosettable copolymer [62226-32-8] emulsions were prepd. by irradiation and persulfate copolymer of Bu methacrylate, 2-hydroxyethyl methacrylate, and acrylic acid. The polymer behavior of both initiation methods was similar. The emulsion properties, however, differed from one another in the distribution of carboxyl groups and particle size. The irradiation method produced an emulsion having particles of smaller size and less water-soluble polymers than the persulfate method. For the irradiation method, the mechanical stability and mutual solubility with melamine resin and water-soluble polymers for paint formulations were tested to determine the optimum polymer conditions. An excellent emulsion was obtained with a semicontinuous process using Na 2-hydroxy-3-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]propanesulfonate [87202-44-6] and polyethylene glycol nonylphenyl ether [9016-45-9] of HLB 16.
 ST acrylic polymer thermosetting emulsion; irradiation polymer acrylic monomer; persulfate polymer acrylic monomer; paint water soluble acrylic; emulsifier acrylic polymer; hydroxyethyl methacrylate copolymer thermosetting emulsion; particle size thermosetting acrylic emulsion; carboxylic group thermosetting acrylic emulsion
 IT Carboxyl group
 (distribution of, in thermosetting acrylic polymer emulsions, polymer catalyst system effect on)
 IT Radiation, chemical and physical effects
 (emulsion polymer by, in preparation of thermosetting products)
 IT Particle size
 (of thermosetting acrylic polymer emulsions, polymer catalyst system effect on)
 IT Emulsifying agents
 (anionic, for thermosetting acrylic polymers)
 IT Coating materials
 (emulsion, acrylic, thermosetting, polymers for, preparation of)
 IT Polymerization catalysts
 (emulsion, persulfates, for acrylic monomers in preparation of thermosetting products)
 IT 13445-49-3D, salts
 RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polymn. of acrylic monomers in prepn. of thermosetting emulsions)

IT 151-21-3, uses and miscellaneous 9051-57-4 87202-43-5 87202-44-6
87212-76-8
RL: USES (Uses)
(emulsifiers, for crosslinked acrylic polymers)

IT 9016-45-9
RL: USES (Uses)
(emulsifiers, for thermosetting acrylic polymers)

IT 76642-20-1P 87227-73-4P 87250-28-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(thermosetting emulsions of, prepn. of)

IT 62226-32-8
RL: USES (Uses)
(thermosetting emulsions of, properties of, polymn. catalyst system effect on)

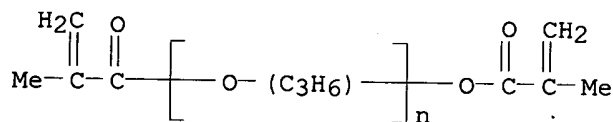
IT 87250-28-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(thermosetting emulsions of, prepn. of)

RN 87250-28-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and 2-propenoic acid (9CI) (CA INDEX NAME)

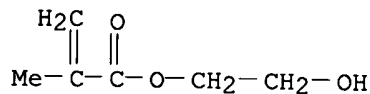
CM 1

CRN 25852-49-7
CMF (C3 H6 O)_n C8 H10 O3
CCI IDS, PMS



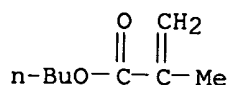
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

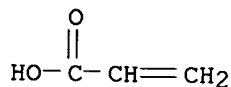
CRN 97-88-1
CMF C8 H14 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



L53 ANSWER 43 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1982:583604 HCAPLUS

DN 97:183604

TI Radiation compensation filters

PA Kyowa Gas Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC G01N023-02; A61B006-06

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 56142444 | A2 | 19811106 | JP 1980-45716 | 19800409 |
| PRAI | JP 1980-45716 | | 19800409 | | |

AB A transparent radiation (esp. x-ray) compensation filter plate was molded from radiation-absorbing, Pb-contg. acrylic polymers in a desired varying thickness pattern, and the hollow areas were filled with a resin having a refractive index similar to that of the filter material and transparent to both visible light and radiation to give distortion-free filter plates. For example, a filter plate (refractive index 1.54) was molded from 17:50:17:16 2-hydroxyethyl methacrylate-lead methacrylate-Me methacrylate-styrene copolymer [66056-05-1] contg. 40 phr lead octoate [15696-43-2], and the hollow area was filled with a sirup from PMMA 25, methacrylic acid 5, Me methacrylate 70, and AIBN 0.2 part, irradiated with light for 10 h, and heated at 80.degree. for 2 h to give a smooth-surfaced filter transmitting distortion-free images (filler refractive index 1.49).

ST x ray compensation filter; lead acrylate copolymer radiog filter; acrylic polymer radiation filter

IT Radiography

(compensation filters for, lead-contg. acrylic polymers for transparent)

IT Naphthenic acids, compounds

RL: USES (Uses)

(lead salts, radiation compensation filters contg., for x-ray radiog.)

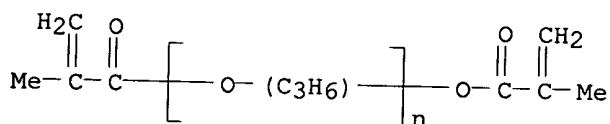
IT Transparent materials

(lead-contg. acrylic polymers)

- IT Polyesters, uses and miscellaneous
 RL: USES (Uses)
 (unsatd., of refractive index-compensating materials, in radiation compensation filters)
- IT 15696-43-2
 RL: USES (Uses)
 (acrylic polymer radiog. filter comps. contg.)
- IT 83457-66-3
 RL: USES (Uses)
 (graft, refractive index-compensating fillers, for radiation compensation filters, for x-ray radiog.)
- IT 7439-92-1D, naphthenates 13094-04-7
 RL: USES (Uses)
 (radiation compensation filters contg., for x-ray radiog.)
- IT 66055-87-6 66055-93-4 66056-03-9 66056-04-0 66056-05-1
 68155-47-5 83003-68-3 **83003-69-4** 83455-21-4 83455-22-5
 83455-23-6 83455-24-7 83468-67-1
 RL: USES (Uses)
 (radiation compensation filters, **transparent**, for x-ray radiog.)
- IT 25035-81-8
 RL: USES (Uses)
 (refractive index-compensating fillers, for radiation compensation filters, for x-ray radiog.)
- IT 25086-15-1 83513-72-8
 RL: USES (Uses)
 (refractive index-compensating fillers, in radiation compensation filters, for x-ray radiog.)
- IT **83003-69-4**
 RL: USES (Uses)
 (radiation compensation filters, **transparent**, for x-ray radiog.)
- RN 83003-69-4 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, lead(2+) bis(2-methyl-2-propenoate) and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

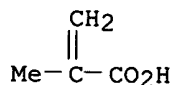
CM 1

CRN 25852-49-7
 CMF (C3 H6 O)_n C8 H10 O3
 CCI IDS, PMS



CM 2

CRN 1068-61-7
 CMF C4 H6 O2 . 1/2 Pb

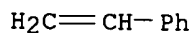


1/2 Pb(II)

CM 3

CRN 100-42-5

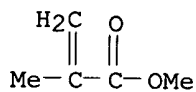
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 44 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1982:225212 HCAPLUS

DN 96:225212

TI Composition for preparing a shield against neutrons

IN Schmitt, Joseph Michael; Quinn, Richard James

PA Kyowa Gas Chemical Industry Co., Ltd., Japan

SO Fr. Demande, 21 pp.

CODEN: FRXXBL

DT Patent

LA French

IC C08L033-10; C08L025-04; C08F020-18; C08K005-55; G21F001-10

CC 71-9 (Nuclear Technology)

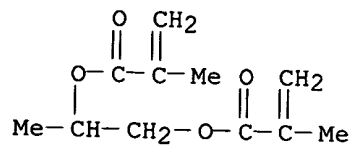
Section cross-reference(s): 36, 37, 38

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | FR 2455067 | A1 | 19801121 | FR 1979-10910 | 19790427 |
| | FR 2455067 | B1 | 19840713 | | |
| PRAI | FR 1979-10910 | | 19790427 | | |

AB Materials of high optical transparency, mech. resistance and n shielding properties were prepd. and tested. A polymer of an alkyl methacrylate, such as Me methacrylate, and an ester of boric acid with .gtoreq.1 aliph. polyol such as a 1,3-glycol was used. Compds. of this type have high shielding power against fast and thermal n because of the B contained in them. They were tested for radiation damage, and the method of prepn. of such compds. is given.

- ST optically transparent polymer neutron shield; polymer neutron shielding; neutron shield transparent strong; health physics shielding neutron polymer; safety shielding neutron polymer
- IT Health physics
(neutron shielding with polymers in relation to)
- IT Polymers, uses and miscellaneous
RL: USES (Uses)
(shields, against neutrons)
- IT 10043-35-3D, esters with polyols
RL: PROC (Process)
(neutron shielding material from polymers contg.)
- IT 12586-31-1, chemical and physical effects
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(shielding against, materials for)
- IT 97-63-2D, reaction products with boric acid, polymers with styrene
97-88-1D, reaction products with boric acid, polymers 97-90-5D, reaction products with boric acid, polymers with Me methacrylate 100-42-5D, reaction products with boric acid, polymers with Me methacrylate 1985-51-9D, reaction products with boric acid, polymers with Me methacrylate 2082-81-7D, reaction products with boric acid, polymers with Me methacrylate 3290-92-4D, reaction products with boric acid, polymers with Me methacrylate 7559-82-2D, reaction products with boric acid, polymers with Me methacrylate 77468-17-8D, reaction products with boric acid, polymers with Me methacrylate
RL: PROC (Process)
(shields, for neutrons, with optical transparency)
- IT 56-81-5D, reaction products with boric acid, polymers with Me methacrylate
57-55-6D, reaction products with boric acid, polymers with Me methacrylate
71-36-3D, reaction products with boric acid, polymers with Me methacrylate
77-99-6D, reaction products with boric acid, polymers with Me methacrylate
80-62-6D, polymers with boric acid-polyol reaction products 94-96-2D, reaction products with boric acid, polymers with Me methacrylate
107-21-1D, reaction products with boric acid, polymers with Me methacrylate 107-41-5D, reaction products with boric acid, polymers with Me methacrylate 107-88-0D, reaction products with boric acid, polymers with Me methacrylate 110-63-4D, reaction products with boric acid, polymers with Me methacrylate 126-30-7D, reaction products with boric acid, polymers with Me methacrylate 868-77-9D, reaction products with boric acid, polymers with Me methacrylate 2568-33-4D, reaction products with boric acid, polymers with Me methacrylate 4457-71-0D, reaction products with boric acid, polymers with Me methacrylate 5919-74-4D, reaction products with boric acid, polymers with Me methacrylate 7564-64-9D, reaction products with boric acid, polymers with Me methacrylate 10095-20-2D, reaction products with boric acid, polymers with Me methacrylate 79796-12-6D, reaction products with boric acid, polymers with Me methacrylate
RL: PROC (Process)
(shields, for neutrons, with optical transparency and radiation resistance)
- IT 7559-82-2D, reaction products with boric acid, polymers with Me methacrylate
RL: PROC (Process)
(shields, for neutrons, with optical transparency)
- RN 7559-82-2 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



L53 ANSWER 45 OF 47 HCAPLUS COPYRIGHT 2003 ACS
 AN 1979:541663 HCAPLUS
 DN 91:141663
 TI Boron-containing transparent plastic sheets
 IN Tadokoro, Shinichi; Segawa, Hirozo
 PA Kyowa Gas Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC C08F012-08; C08F002-44; C08F020-12
 CC 36-6 (Plastics Manufacture and Processing)
 FAN.CNT 1

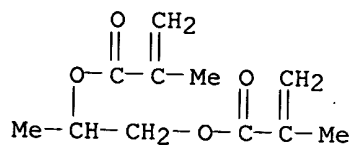
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|-------------|-------------|-----------------|-------------|
| PI | JP 54057585 | A2 | 19790509 | JP 1977-123926 | 19771015 |
| | JP 57042082 | B4 | 19820907 | | |
| PRAI | JP 1977-123926 | | 19771015 | | |
| AB | Mixts. of C1-4 alkyl methacrylate or styrene, C3-16 arom. or aliph. polyols, and borate esters (B 0.5-6 wt.% of the mixt.) are polymd. to give transparent neutron-shielding polymers having good mech. strength. Thus, a mixt. of H3BO3 61.8, 3-methyl-1,3-butanediol 208, and Me methacrylate (I) 250 parts was stirred at 60.degree. under reduced pressure to remove 46 parts H2O and give a borate ester [71343-40-3] soln. in I contg. 4.0% B. A mixt. of the above soln. 10, Et methacrylate 8, and hexamethylene dimethacrylate 2 parts was polymd. in a glass mold in the presence of 0.015 wt.% AIBN at 80.degree. for 4 h and at 120.degree. for 2 h to give an 8-mm copolymer [71332-08-6] plate having excellent transparency and dimensional stability. | | | | |
| ST | polyol borate ester; methacrylate polymer neutron shield; transparency neutron shield | | | | |
| IT | 9011-14-7P | 25034-86-0P | 25608-33-7P | 25777-71-3P | 26950-76-5P |
| | 28931-67-1P | 52857-82-6P | 66562-02-5P | 71332-08-6P | 71332-09-7P |
| | RL: PREP (Preparation) (manuf. of neutron-shielding, contg. polyol borate esters, transparent) | | | | |
| IT | 42220-19-9 | 71343-36-7 | 71343-37-8 | 71343-38-9 | 71343-39-0 |
| | 71343-40-3 | 71343-41-4 | 71343-42-5 | 71343-43-6 | 71343-44-7 |
| | 71343-45-8 | 71343-46-9 | 71343-47-0 | 71343-48-1 | |
| | RL: USES (Uses) (methacrylate polymer plate contg., neutron-shielding) | | | | |
| IT | 12586-31-1 | | | | |
| | RL: USES (Uses) (shielding against, methacrylate polymers contg. polyol borates for, with improved transparency) | | | | |
| IT | 71332-09-7P | | | | |
| | RL: PREP (Preparation) (manuf. of neutron-shielding, contg. polyol borate esters, transparent) | | | | |
| RN | 71332-09-7 | HCAPLUS | | | |

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
1-methyl-1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 7559-82-2

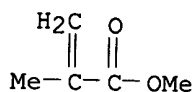
CMF C11 H16 O4



CM 2

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 46 OF 47 HCAPLUS COPYRIGHT 2003 ACS
AN 1978:137615 HCAPLUS
DN 88:137615
TI Material for radiation shielding
IN Nagai, Haruo; Uehara, Hiroshi; Nunokawa, Kunikazu
PA Kyowa Gas Chemical Industry Co., Ltd., Japan
SO Ger. Offen., 23 pp.
CODEN: GWXXBX
DT Patent
LA German
IC C08F220-06
CC 37-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 71
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | DE 2732006 | A1 | 19780119 | DE 1977-2732006 | 19770715 |
| | DE 2732006 | C2 | 19850411 | | |
| | JP 53009996 | A2 | 19780128 | JP 1976-84617 | 19760716 |
| | JP 57011439 | B4 | 19820304 | | |
| | JP 54001797 | A2 | 19790108 | JP 1977-65728 | 19770606 |
| | JP 57011440 | B4 | 19820304 | | |
| | US 4129524 | A | 19781212 | US 1977-815175 | 19770713 |
| | GB 1575698 | A | 19800924 | GB 1977-29526 | 19770713 |
| | CS 196213 | P | 19800331 | CS 1977-4708 | 19770714 |
| | BR 7704689 | A | 19780516 | BR 1977-4689 | 19770715 |
| | DD 131880 | C | 19780726 | DD 1977-200102 | 19770715 |
| | AU 7727070 | A1 | 19790118 | AU 1977-27070 | 19770715 |
| | AU 515757 | B2 | 19810430 | | |

| | | | | |
|--------------------|----|----------|-----------------|----------|
| CA 1082845 | A1 | 19800729 | CA 1977-282844 | 19770715 |
| SU 904528 | A3 | 19820207 | SU 1977-2508651 | 19770715 |
| ES 461464 | A1 | 19780601 | ES 1977-461464 | 19770716 |
| PL 110657 | B1 | 19800731 | PL 1977-199696 | 19770716 |
| FR 2358729 | A1 | 19780210 | FR 1977-21976 | 19770718 |
| FR 2358729 | B1 | 19800215 | | |
| PRAI JP 1976-84617 | | 19760716 | | |
| JP 1977-65728 | | 19770606 | | |

AB The title compn., with improved transparency and strength, was prepd. by polymg. Pb (meth)acrylate with alkyl methacrylates, hydroxyalkyl (meth)acrylates, and/or styrene in the presence of Pb C6-21 carboxylates in specified ratios. Thus, heating a mixt. of Me methacrylate 17, styrene 16, 2-hydroxyethyl methacrylate 17, Pb dimethacrylate 50, and lead dioctanoate (I) [7319-86-0] 40 g with 0.1% lauroyl peroxide 5 h at 80s and 1 h at 120.degree. gave a copolymer [66056-05-1] with light transmittance 89%, impact strength 2.8 kg-cm/cm², and Pb equivalence (68.8-keV x-rays) 0.34 mm, compared with 5, 8.3, and 0.21, resp., in the absence of I, and transparent, <0.1, and 0.79, resp., for Pb methacrylate homopolymer.

ST. radiation shielding copolymer; lead methacrylate copolymer radiation shield; octanoate lead radiation shield; styrene copolymer radiation shield

IT Radiation
(shielding against, lead methacrylate copolymer contg. lead carboxylates for, transparent)

IT 1072-35-1 1120-46-3 7319-86-0 7439-92-1D, naphthenic acid salts
13094-04-7 15773-52-1 15773-53-2 32112-52-0 33627-12-2
66063-62-5 66063-63-6
RL: USES (Uses)
(lead methacrylate copolymers contg., for transparent radiation shielding)

IT 66055-87-6 66055-88-7 66055-92-3 66055-93-4 66055-94-5
66055-95-6 66055-96-7 66055-97-8 66055-98-9 66055-99-0
66056-00-6 **66056-01-7** 66056-02-8 66056-03-9 66056-04-0
66056-05-1
RL: USES (Uses)
(radiation shielding, **transparent**)

IT **66056-01-7**
RL: USES (Uses)
(radiation shielding, **transparent**)

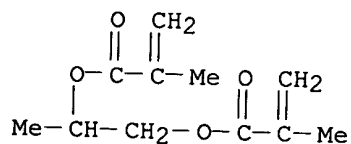
RN 66056-01-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, polymer with ethenylbenzene, lead(2+) bis(2-methyl-2-propenoate) and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7559-82-2

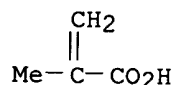
CMF C11 H16 O4



CM 2

CRN 1068-61-7

CMF C4 H6 O2 . 1/2 Pb

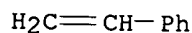


1/2 Pb(II)

CM 3

CRN 100-42-5

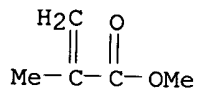
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



L53 ANSWER 47 OF 47 HCAPLUS COPYRIGHT 2003 ACS

AN 1968:420265 HCAPLUS

DN 69:20265

TI Grafting glycol dimethacrylate polymers to cellulose in the presence of cerium ions

AU Azizkhanov, T.; Savranskaya, S. D.; Askarov, M. A.

CS USSR

SO Uzbekskii Khimicheskii Zhurnal (1968), 12(1), 41-3
CODEN: UZKZAC

DT Journal

LA Russian

CC 39 (Textiles)

AB Graft copolymn. of ethylene dimethacrylate (I), b5 98-100.degree., n20D 1.456I, d20 1.049 and propylene dimethacrylate (II), b3 100-2.degree., n20D 1.4510, d20 1.022, to cellulose (III), cotton (IV), and viscose fiber (V) in the presence of Ce4+ was studied. The yield of copolymer with IV and V was highest with monomer concn. of 0.5 g. mole/l. The copolymer yield for III was 15-20% during 2 hrs. At initiator and monomer concn. 5.10-3 and 0.5 g. mole/l., resp., a 40.degree. temp. was most favorable.

- Under **optimum** reaction conditions the highest yield of graft copolymer was obtained with V. I-III and II-III copolymers have decreased mech. stability while light and decay resistance is increased.
- ST methacrylate graft polymers; graft polymers methacrylate; cotton grafted; cellulose grafted; viscose fiber grafted; fiber viscose grafted
- IT Cotton
Rayon, preparation
RL: PREP (Preparation)
(ethylene and propylene dimethacrylate-grafted, by cerium ion initiation and stability of polymers)
- IT 9004-34-6P, preparation
RL: PREP (Preparation)
(ethylene and propylene dimethacrylate-grafted, by cerium ion initiation and stability of grafts)
- IT 7559-82-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(polymers with cellulose and cotton and rayon, graft, prepn. by cerium ion)
- IT 97-90-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(polymers with cellulose and cotton and rayon, graft, prepn. by cerium ions)
- IT 7559-82-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(polymers with cellulose and cotton and rayon, graft, prepn. by cerium ion)
- RN 7559-82-2 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

